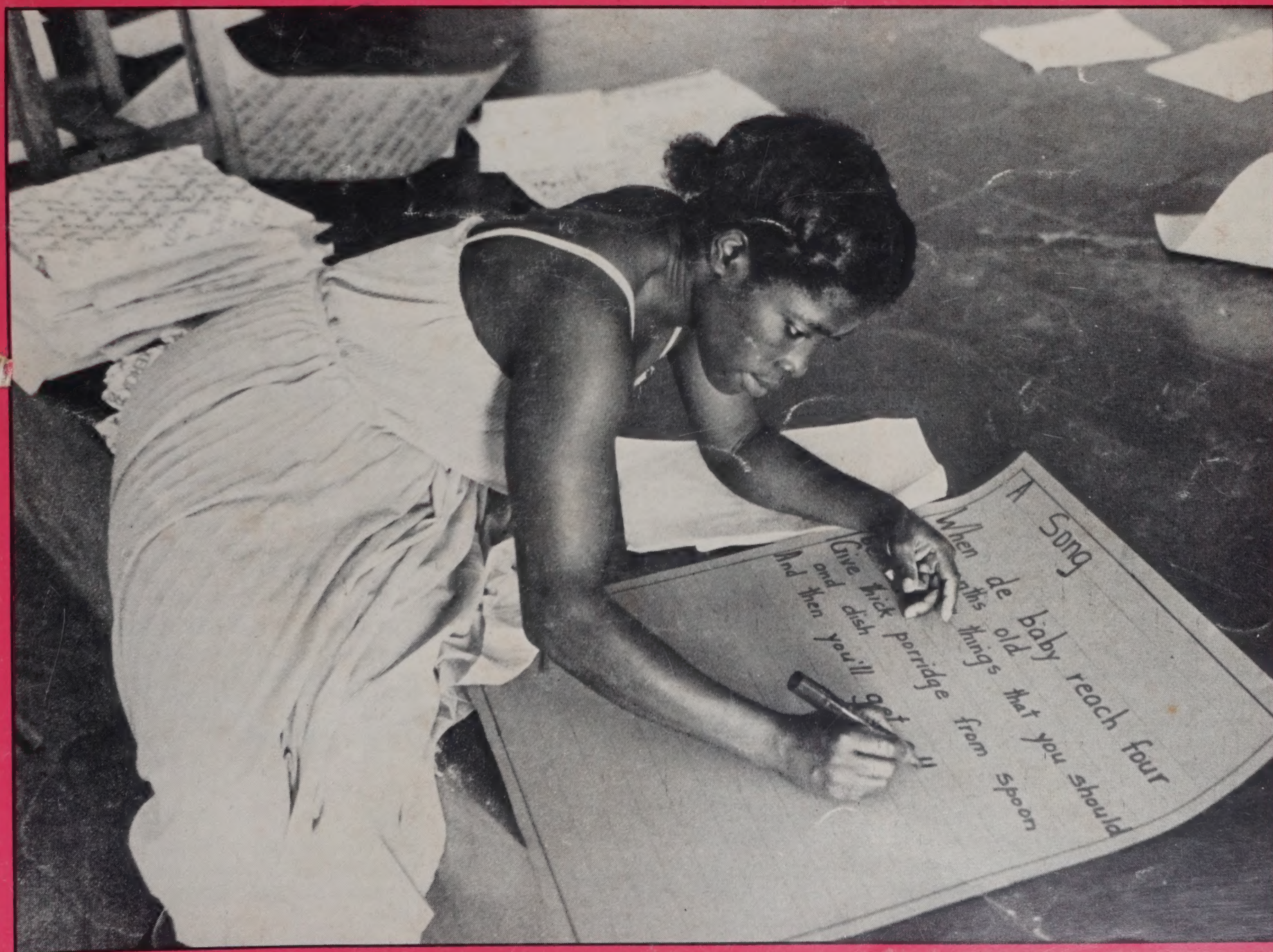


Child survival: Right from the start

- Madagascar: The pre-schoolers flower
- Jamaica: "Love him, and mek him learn..."
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A new goitre-control technology is providing Burmese women—and their unborn children—relief from the crippling disease. By SAMPHE LHALUNGPA. *page 23*

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There's a better solution to night-blindness than rectifying it with Vitamin A capsules, writes S. KAMALUDDIN from Bangladesh. *page 25*

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The disparate social welfare programmes for Indonesia's young children are being amalgamated in a single package in a pilot project. By WARIEF DJAJANTO. *page 26*

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Women in parts of Malaysia are beginning to sign their name on cheques, bring home more money and do a little accounting—thanks to a pre-school programme. By FOONG PETO. *page 28*

A WIDER ROLE FOR BIRTH ATTENDANTS

Their presence in even the remotest Kenyan communities, and the high regard in which they are held, makes TBA's effective health educators. By LINDSEY HILSUM. **Inset:** An interview with Phoebe Asiyo, Member of Parliament. *page 30*

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In UNICEF's news: Impact, the International Initiative Against Avoidable Disablement, launched in India; a new pretesting manual and other publications from UNICEF. *page 34*



Child survival: joining the revolution



The "revolution" to save children's lives and enhance their development has been going on quietly in the Third World for decades. The success of efforts to accelerate this progress will depend on changes in the attitudes and understanding of both the poor and those seeking to contribute to their development. By SALIM LONE.



The *New York Times* has recently been using a new indicator for measuring human welfare in American cities: the infant mortality rate (IMR). In Thailand, Buddhist temples are disseminating information about growth monitoring and other child-saving techniques, while Catholic priests in Latin America are including advice about immunization at the baptismal font. The Red Cross, after years of mobilizing blood donors and teaching millions first-aid, is including in its community programmes instruction on simple health actions which can greatly improve children's welfare. And millions who never before knew how to recognize and treat diarrhoea-induced

"Rapid social advances in developing countries were catalysed in part by new-found freedom and subsequently by the revolution in communication and education." ICEF 8756/India/Wolff

dehydration are now aware of the oral rehydration solution known as ORS.

Such widespread expressions of concern and involvement are amongst the consequences of recent efforts by UNICEF and others to move the question of children higher on the world's political agenda. This effort was facilitated by the identification of a set of child protection opportunities capable of dramatically reducing millions of preventable deaths every year and providing children with the healthy start crucial to a

productive future. These opportunities were discussed in the last issue of *UNICEF News*. This current issue continues with reports on other programmes aiming to provide a variety of services with significant potential for early childhood development.

Whether all these innovations and services have the impact expected of them will depend to a considerable extent on the attainment of certain social goals which, in principle at least, enjoy strong sanction among most of the world's nations. The most important of these are female education, birth spacing, and food supplements for the neediest (see *Child survival: the prerequisites*, p. 18).

In the developed countries, the abundance of resources, social infrastructure, and generalised education make the task of further enhancing child welfare relatively easy. But in areas where the need for child-oriented action is the greatest—that is, developing countries with high levels of infant mortality and childhood disease—such a commitment is infinitely harder because their limited resources are already under pressure from other urgent priorities at both the national and family levels: growing food, providing (or finding) jobs, developing a sound economic infrastructure.

Further inhibiting the development of national and community mobilization in the Third World are the perception of the historically low levels of health and high rate of death among children as "fatefully-decreed inevitabilities." As Tarzie Vittachi, UNICEF's Deputy Executive Director, has written, people forced to spend so much of their energy and time in finding ways to subsist are unlikely to mentally step back from their deprivations to see that "fate does not have to be destiny."

Not much more than a hundred years ago, the industrialized countries were at about the level of social development now prevailing in most of the Third World. Cities like

turn to page 33

The neighbours may disapprove...

Some of Nhok Theksok's customers for "the pill" would like to be sterilized, but their husbands and neighbours would disapprove. In the southern provinces of Thailand religious and cultural barriers to deliberately limiting family size are strong. But the *spacing* of births is different. By YULI ISMARTONO.

Nhok Theksok of Ban Samnakham village in southern Thailand keeps odd hours. Her day begins at 1 a.m., when she and her husband ride 15 kilometres through pitch dark forests on a motorcycle to reach their place of work. For the next eight hours, by the light of home-made kerosene lamps tied around their heads, they will slit the bark trees.

Nhok and her husband are tappers of the rubber trees that dominate the landscape. The sap that eventually becomes rubber, Thailand's third biggest export commodity, flows best in the cool dark hours of early morning.

When her work is done, Nhok heads home to another job she considers equally important: she is a malaria volunteer worker, and has the added task of motivating her fellow villagers on family spacing.

Nhok is one of hundreds of village volunteer workers currently taking part in a new effort to tackle the problem of high population growth in the south. Although nationally the growth rate has been substantially reduced, from over 3 per cent in 1976 to 2.1 per cent in 1981, that of the south remains comparatively high, at about 2.6 per cent.

In recent years, national family planning programmes were expanded to include family health care and education in the belief that family planning has to concern itself with more than reducing population growth. It is part of the larger health picture and re-



Amongst the problems health workers are working with are malaria and family-spacing. UNICEF 637/83/Thailand/Ismartono

quires improving general health status through such measures as teaching villagers the basic concepts of nutrition, sanitation and prevention of diseases.

Thus when Ban Samnakham village a year ago began participating in such a programme, 45-year-old Nhok was chosen to be responsible for implementation. Over the preceding three years she had earned the trust and respect of her fellow villagers as

a malaria volunteer worker, taking blood samples of suspected malaria victims and providing information on prevention.

Until very recently, malaria was one of the region's most serious health problems. At one time one in every four people died of it. Intensive eradication campaigns and the efforts of volunteers like Nhok today have reduced deaths from malaria to about one in 10,000.

The programme is still continuing because malaria remains a problem, particularly in the dense rubber forests where most people in southern Thailand spend their working hours.

Shattering myths and misconceptions

In a village like Ban Samnakham, it is not easy to motivate people to adopt family planning and better health care habits. Not only does Nhok have to contend with the general lack of education. She has to surmount the even bigger hurdle of restrictive cultural values, which inhibit people who would otherwise be willing acceptors.

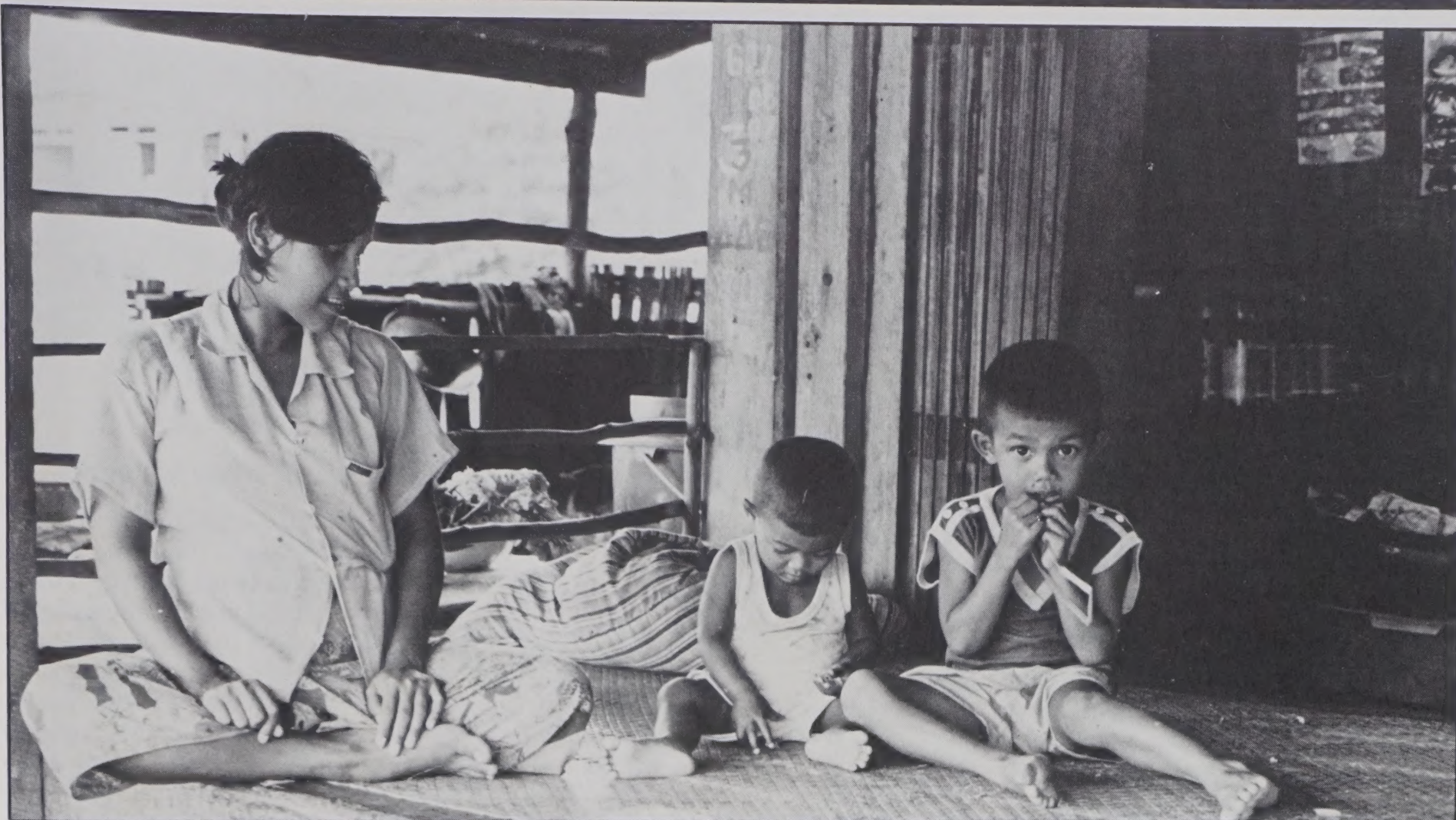
Thailand's southern provinces are predominantly Moslem. According to the 1970 census, over 90 per cent of the Thai population are Buddhist and about five per cent are Moslems, 80 per cent of whom live in the southern border provinces.

Thai Moslems are very sensitive to the notion of limiting the number of children families should have. Sterilization is anathema to religious leaders, whose word is basically law.

At the same time, most realize the economic burden of an oversized family, particularly among the poor landless workers of rubber plantations. For this reason, many accept certain preventive methods on the basis not of limiting family

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size, but of spacing births.

It is on this basis that Nhok performs her task as a malaria-cum-family-spacing agent in her village of about 100 households. Nhok says that this month, she was visited by five women who accepted oral pills to prevent pregnancy, half the number of acceptors three months ago. Most of her customers are mothers with two children. Some confide their desire for sterilization, but are fearful of their husbands' and the neighbours' disapproving attitudes.

Nhok encounters stubborn resistance to certain health care habits connected to family welfare. Nhok believes it is because many of the villagers lack proper knowledge of the benefits of such health practices.

One of the biggest problems is convincing mothers of the need to have their children properly immunized. "It usually takes a near-epidemic before villagers start paying attention to the importance of immunization," says Nhok. The general attitude is: "no sickness, no immunization necessary." It is particularly difficult to convince mothers when there are after-effects. "When mothers see their children developing fever and other discomforts following an immunization, they think the shot must not be good after all."

Studies give evidence of a certain reluctance on the part of Thai Moslem women to visit government health centres located in most districts of the southern provinces.

There is no reason why family spacing programmes cannot be effective in the South. UNICEF 638/83/Thailand/Ismartono

Preferring to consult traditional healers and use home-made medication, these mothers — and consequently their children — miss out on the opportunities of receiving free immunizations and exposure to information on better sanitation, hygiene and nutrition.

As a result, children in remote rural areas frequently suffer from such common ailments as hookworm and *khaiwat* — or colds. These can be debilitating enough to render them anaemic and thus easily vulnerable to other more serious disease.

Children more knowledgeable than parents

Although Dr. Virat Anantvoranich, head of the Community Medicine Section in Songkhla General Hospital, supports the programme of enlisting malaria volunteers to spread the word about family spacing, he feels that the priorities are in the wrong order.

"We're jumping the gun," he said of programmes aimed at reducing birth rates in the south. He feels that there should be an intensive government-run family spacing education campaign, with a comprehensive health information package — including sex education for the young — before "pushing

pills." He questions the effectiveness of the malaria volunteers in providing adequate information on the benefits of spacing families and preventive health.

"Religion is often blamed for the lagging performance of family planning programmes in this region. But I think it is caused by the inadequate groundwork laid before programme implementation," says Dr. Virat. He is optimistic that people will generally accept the concept of family spacing, given enough information on the subject.

Dr. Virat believes that hopes of changing attitudes lie with the youth. About three times a week, he visits schools in the villages of Songkhla to inform secondary-school students of the importance of spacing births and a healthy family in order to improve living standards. He is convinced that parents tend to listen to their schoolchildren, because of a faith in the education the children are getting.

The problem in Thailand's southern provinces is complicated but not unsolvable. Despite cultural constraints, programmes aimed at reducing birth rates have a good chance of succeeding, as they have in the rest of the country. Most people feel the need to space births, but an educational programme to dispel confusion and misconceptions is needed. This would certainly help the efforts of community-based workers like Nhok Theksok. □

Learning the joys of childhood

Rapunzel Herrera is eight-years-old, but is so severely disabled that she cannot talk, walk, or control what are normally instinctive muscular movements. But she has at least been taught how to laugh, thanks to a new community-based health programme for the disabled. By NENI STA. ROMANA-CRUZ.

Rapunzel Herrera lives in the coastal town of Guimbal in southern Philippines. When she was born her maternal grandfather Rafael knew exactly what he wanted to call her: Rapunzel, the fairy-tale character, had greatly intrigued him during his young impressionable years, when he was beginning to learn his smattering of English. He had especially enjoyed the part of the story when someone called out to the heroine: "Rapunzel, bring down your hair!" He would soon call out the very same words to his own little princess.

Unfortunately, Rapunzel's life has been a painful departure from the storybook scenario.

She appeared normal at birth, although somewhat underweight. But that was nothing special to worry about in a village where low-weight babies are common. However, when the baby could not recognize or even see anyone long after she should have been able to, the family became anxious.

Her grandfather did not live long enough to see that although his cherished Rapunzel had black, healthy hair, there was little else about her that resembled his heroine. Afflicted with cerebral palsy, she has not been able, even though she is now eight, to learn to talk or walk. Unlike other children her age, even laughter has had to be taught her. That it has been is thanks to the diligent assistance of 28-year-old Teresita Flores, a community worker who visits Rapunzel at her home regularly.

Teresita considers it a major achievement that this little girl can now bring a spoonful

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of food to her mouth, play along willingly as they go through muscular exercises to help her gain control over her body, and that she gleefully responds to the secret nonsense language that the two share.

Teresita is in fact an indispensable presence in the Herrera household. Rapunzel is under the care of her grandmother, whose pressing worries not only include Rapunzel's future but the source of the next family meal. The household, she says, is dependent on her son's earnings as a Manila security guard—but for the past three months, he has not been heard from.

Salome, Rapunzel's mother, could not look after her daughter even if she wanted to: she herself needs close care. During her early years of schooling, she became seriously ill with typhoid fever. Her condition seemed to be improving until one day, on her daily two-kilometre walk to school, she was caught in a heavy thunderstorm. Her mother is convinced to this day that the lightning that flashed at the height of the downpour is responsible for Salome's epilepsy.

The epilepsy deteriorated after an out-of-town trip that she and her husband took without Salome. Upon their return, the old woman was horrified to discover that a terrible transformation had taken place in Salome's behaviour: she was tearing off her clothes, ripping them into shreds and eating every small piece. And it soon also became clear that she had been sexually abused, and was pregnant.

Now Salome and Rapunzel live in the same bamboo house, but they may as well be living apart. Neither one recognizes the other.

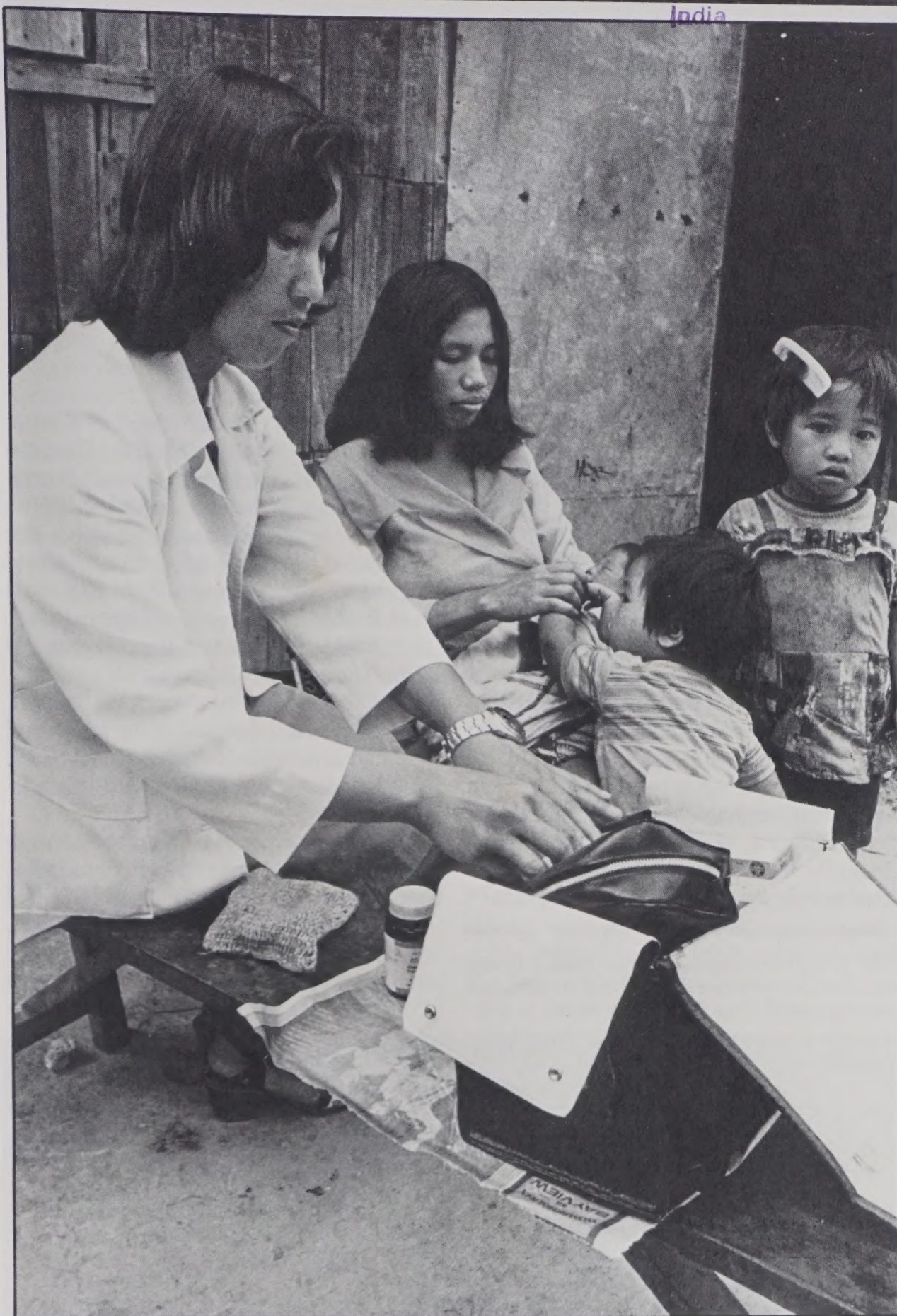
Florencio can write his name

In a *barangay*—community—nearby lives thirteen-year-old Florencio Torrendon. He could easily pass for any normal child, but for the fact that he is repeating his first grade class for the third consecutive year. This does not discourage him though, because for the first time in his life he can write both his names. Sometimes, between the two r's of his surname, his thoughts begin to stray and he can no longer continue what for him is a major undertaking. But a quick reminder from his mother gets him back on track and he remembers what letter he is to write next. According to her, Florencio's difficulty lies in "his hand not being able to write what his mind wants him to."

Florencio would have abandoned all thoughts of school completely were it not for his community worker who has decided to let him persevere in the same grade, if only for socialization purposes. The difference in his relative success this term is the close observation and participation the community worker makes within Florencio's very classroom.

It also helps that his mother faithfully follows the stipulated exercises taught her to improve her son's grip. These they do ten minutes a day between her basket-weaving and the care of six younger children. He has also had to relearn proper foot posture for walking after an operation two years ago for a condition that has bothered him from birth.

These days, Florencio walks to school alone, frets when his school work is not done, and comes home each day bubbling about the day's songs and stories. He diligently fetches water for his family and even ventures on errands to the market. But he has to carry his mother's shopping list least he forget what the errand is all about. On these trips to town, Florencio is greeted by townspeople who have come to regard him affectionately. This acceptance from



Community-based health workers help provide services to prevent and treat child disability.
Photo: UNICEF

people is a source of great satisfaction for him.

The whole effort has brought about for the mother a heightened awareness of her children's special needs. She now tends a vegetable garden where she grows *kangkong* and *alugbati*, two, but highly nutritious local vegetables. She is also especially watchful about the immunization schedules of her children. In fact, health

care has become such a priority that mothers like Florencio's are those pushing to make it widely available.

A new kind of health network

There are many other Rapunzels and Florencios in Guimbal, children whose worlds have been made brighter through the community-based health network which prevents, detects, and treats childhood disability. Such networks are spreading throughout the Philippines, reaching those for whom a facility-based, "professional" health service is inaccessible. The National

Commission Concerning Disabled Persons (NCCDP) and UNICEF are seeking ways to de-institutionalize disability programmes and redistribute available resources to strengthen the family's and community's ability to care for their disabled.

One of the first tasks NCCDP has undertaken is an educational programme to counter the prevalent myths and the general lack of information about disability. It has begun packaging educational materials in popularized formats such as comic books, illustrated story pamphlets and posters. These provide the people of Guimbal with entertainment as well as simple messages explaining how marriages between blood relatives, poor nutrition and inadequate pre-natal care can result in disability.

These are radical notions for *barrio* people who have always ascribed disability to causes such as exposure to an eclipse during pregnancy, the non-gratification of the cravings experienced by expectant mothers, or even witchcraft. But the commonest view was that it is an act of God. Consequently, disability was often viewed with such shame and embarrassment that households often kept its presence a tightly-guarded secret. As Dr. Atanasia Siva, a specialist working closely with the programme, said: "If disability is not even admitted, how can there be a cure?"

The community-based operation clearly is not able to deal with more serious disabilities, which are referred to institutions equipped to deal with them. The most common referrals from Guimbal have been for cleft lip operations, which are performed free of charge at the municipal hospital.

There is much pride in the programme's progress in the ten pilot *barangays* of Guimbal, primarily because the community has proven what it is capable of doing for the disabled. But the work has only begun, according to youthful Project Co-ordinator Edwin Gencito. He is preoccupied with devising ways to sustain the programme from income that he hopes will be community-generated. He is eager to raise funds to organize office records, increase the current budget limit of 1,000 pesos (US\$50) for cleft lip surgeries, and aid parents in buying the medication they need. His "distant dream" is a rehabilitation centre for the disabled in Guimbal.

It is through people like Edwin Gencito and hundreds of dedicated community workers that Rapunzel and Florencio are beginning to discover what is rightfully theirs: the joys of childhood. That, at least, is no longer "a distant dream." □

A square meal—and schooling—for every child

A remarkable scheme to meet the nutritional needs of Tamil Nadu's seven million 2-to-9 year-olds has enlarged school enrolments, created thousands of jobs, and given a boost to the rural economy.

By P.K. BALACHANDRAN

Just over a year and a half ago, the government of the South Indian state of Tamil Nadu launched a daring nutrition scheme: it pledged to give every child between two and nine years of age and living below the poverty line one square meal a day every day of the year.

The task was enormous. There are over seven million children in this age group in Tamil Nadu, and they are spread over thousands of villages. The cost also was enormous—over US\$120 million a year. But the situation in the state with regard to children had all the makings of a developing emergency, and something clearly needed to be done.

Nearly 40 per cent of all deaths in Tamil Nadu occur among children under the age of four. A third of the children who perish die of malnutrition. The diet atlas of India would show Tamil Nadu somewhere near the bottom of the table of calorific intake per head. The Indian Council of Medical Research has stipulated that under Indian conditions, a child should get at least 2,400 calorific units per day. But surveys in the state showed that barely 45 per cent of the children were getting this required amount. Because of the prevailing poverty, families were unable to afford for each of their children the 9 US cents a day needed to provide this nutritional minimum.

The Green Revolution didn't boost millet production

It is difficult to pinpoint precisely the extent of poverty in the state. The government estimates that about 65 per cent of the people live below the poverty line, but an ILO

publication recently put the figure at 75 per cent. The Green Revolution of the mid-sixties, which brought so much prosperity to the sub-continent and to many in Tamil Nadu, unfortunately completely bypassed the majority of this state's rural population.

The inputs which the much-proclaimed revolution entailed—fertilisers, pesticides, irrigation—were too expensive for farmers with small holdings who, along with landless labourers, were in an overwhelming majority. Over 60 per cent of agricultural land was in the hands of just 10 per cent of

The prosperity engendered by India's Green Revolution bypassed the majority of Tamil Nadu's small farmers. ICEF 9108/India/Wolff

the rural population.

Additionally, the Green Revolution boosted rice production but left millet, the common man's food in the dry and poverty-stricken areas of the state, untouched. With resources being diverted to intensive rice cultivation and with a fall in state-financed irrigation, millet farmers in the dry areas sank further into poverty, and began to lose their land to the 'smarter' (read bigger and richer) farmers. In the ten years of the Green Revolution, from 1961 to 1971, the percentage of landless labourers in the total rural population actually shot up from 22 to 38, clearly indicating a trend towards increasing poverty.

There is a powerful farm lobby in the state, as indeed in most other parts of India, but it has always spoken for the middle and large peasants only. Lacking organisation, farm labourers have frequently been unable to press for the statutory minimum wages from the landlords, and poor small peasants



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were unable to capitalize on the new technologies.

Satisfying palate tastes and body needs

The meal that is now served under the government scheme consists of 80 grammes of rice, 10 grammes of lentils (a major source of protein in India), seven grammes of the non-fatty palmolen oil, condiments, vegetables and greens. It costs less than 5 US cents and meets the basic nutritional requirements. The Avinashilingam Chettiar Home Science College at Coimbatore, under the direction of the well-known nutritionist Dr. (Mrs.) Rajammal Devadas, has worked out a variety of dishes with these basic ingredients to meet the tastes of the palate and the needs of young bodies.

In order to promote education and child care through the demand the scheme was anticipated to produce, it was decided that the children would be fed at the state's 33,323 elementary schools and 4,363 child welfare centres. Parents who wanted their children to be fed were required therefore to enrol them in one of these institutions.

The results have been remarkable, with school enrolments going beyond the year's target of 160,000 children in just three months. These results confirmed findings from previous small-scale meals schemes in the state that enrolment was higher and the drop-out rate lower in districts and schools which provided a free mid-day meal.

A distinctive feature of the scheme was the decision to do away with cumbersome criteria to determine eligibility. And visually, it is very difficult to distinguish between malnourished children and those adequately fed. So in a situation where a substantial majority of the households do not have enough to meet their basic needs, school teachers and child welfare workers were asked not to deny food to *any* child. Unlike many previous nutritional programmes, therefore, the present one has considerable flexibility at the grass-roots level.

The scheme has had several extremely beneficial spinoffs. Increased enrolment immediately created the need for 4,000 more teachers. The commitment to feed every hungry child also meant opening schools about a kilometre apart throughout the state, as well as the establishment of 1,200 more child welfare centres.

The state's farmers have benefitted from the scheme too. The Government today buys 20,000 additional tonnes of rice and 2,400 tonnes of lentils a year from them for this



To promote school enrolment, the feeding scheme required that the meals be served in school.
Photo: Tamil Nadu Information Dept.

scheme alone. Vegetables, condiments and firewood are also bought locally, and the whole operation has given the local small-scale grower and trader as well as the local economy a much-needed boost.

In all, 120,000 new jobs have been created by the scheme so far. Government regulations ensured that these jobs were taken up by those in the most deprived communities and in the weakest sections of society. The cooks and helpers in many places are *harijans*, traditionally considered the 'untouchable' caste. The fact that children of all castes sit together and eat food cooked or served by a *harijan* is in itself a noteworthy social advance.

The scheme has its strains and stresses

Though there has been no disruption of the scheme so far, stresses and strains are evident. For one thing, teachers in general but particularly those in single-teacher schools, feel overburdened by the task of supervising the cooking and feeding of hundreds of children every day without a holiday, and without extra pay. Teachers' organisations have threatened to pull their members out of the scheme if action is not taken soon to specifically recruit people to look after the feeding.

Another problem concerns the cooks and helpers, who are paid far less than the statutory minimum. But unlike the teachers,

these workers are not organised and their voice is not given the hearing it deserves.

Though public contributions have been coming in and have crossed the US\$1 million mark, the well-to-do have not shown enthusiasm for the scheme. Contributors have complained of political coercion. The richer temples which were made to contribute also protested and even threatened court action.

Some critics have pointed out that a nutritious meals scheme cannot have the desired impact unless it is accompanied by a good health delivery system. It is in this sphere that Tamil Nadu has a long way to go. Its per capita spending on health is below the Indian national average. It spends barely eight per cent of its annual outlay on health, which is just one third of the minimum requirement.

The absence of health services in rural, especially remote areas, is a problem. Three quarters of the medical services are in the hands of private practitioners who tend to congregate around the urban centres. The state-run hospitals and clinics are also largely in the urban areas. Rural clinics, where they exist, are often short of staff and medicines as few doctors and officials are keen to serve in the rural areas.

There is evidence, however, that the authorities are conscious that the hard-won benefits gained from the feeding scheme could be offset by an inadequate health delivery network. The newly-introduced health card system—as part of the meals scheme—might therefore be the precursor of a more comprehensive plan for easier access to health care in Tamil Nadu. □

Lugsi's single objective

The few pre-school centres Upper Volta had were expensive and catered mainly to children of the well-to-do. To correct this situation, an experimental pre-school centre in rural Lugsi was set up. In addition to providing an integrated set of services for children, the centre is slowly transforming the life of the whole community.

By ABDOULAYE MALICK TRAORE.

When Upper Volta's current educational reform began, only 729 children—about seven out of every ten thousand of the country's three-to-six-year-old population—attended kindergarten. And of the country's 26 pre-school institutions, all but two were private. To have a child attend one of them could cost anything between CFAF 3,000 (US\$7) to CFAF 12,000 (US\$28) a month. As a result, there were virtually no peasants' or workers' children in these establishments, almost all of which were located in urban areas.

The country's educational reform has been entrusted to the Institut de la Reforme et de l'Action Pedagogique, or the Educational Reform and Action Institute (IRAP). The institute's programme has a strong pre-school component, exemplified in the experimental pre-school centre it has set up in the rural environment of Lugsi. This centre hopes to fulfill, albeit modestly, the basic objectives of a reform aimed at democratizing education, enhancing the status of the country's national languages, and tying in education with production.

Ms. Marie-Bernadette Kabré, head of IRAP's pre-school education department, talked to *Famille et Développement* about the Lugsi experiment which is already being viewed as a pilot project to be replicated nationwide.

Can you tell us where Lugsi is situated and why you chose it?

Ms. Kabré: Lugsi lies 18 km. south-west

Abdoulaye Malick Traore is Director-General of the Association of Africaine d'Education pour la Développement. ASAFED in Dakar publishes Famille et Développement, in which a longer version of this piece first appeared.

of Ouagadougou. It has six districts and a population of 1,723. The 1975 census recorded 405 children aged three to six years.

As for our reasons for choosing Lugsi—well, since the village is not far from Ouagadougou, access is easy. It also has a maternal and child health (MCH) centre which deals with babies and infants up to the age of two; a rural school for adolescents; a literacy centre for young women and mothers; and a dispensary nearing completion.

The peasants' big dream was to have a school, so when we suggested setting up a pre-school centre the villagers agreed at once and said they were ready to help set it up and operate it.

What are the specific aims of such a centre in a rural environment?

Ms. K: The centre's aims are nutritional, health-related, educational and socio-cultural. The nursery plays a balancing role in that it enriches and supplements the children's food rations. We also want the children to learn good habits very early in life. In such things as personal hygiene, etc. Never eating without first washing hands, for example.

The children are also regularly checked by a nurse: they get all the necessary vaccinations and are weighed and measured once a term. We hope that over the years, the infant mortality rate will gradually decline. In addition, in this kind of establishment, the children are all taught together in their mother tongue (in Lugsi, this is Moore). Teachers draw heavily on the children's cultural environment: folk tales

and songs; and references to leaves, millet shoots, pebbles, grains, birds' nests, etc. that they are familiar with.

On the economic level, we want to help lighten the work of mothers and offer them a chance to engage in activity which will bring them a little money: basket-making, weaving, pottery, gardening, all activities which help to improve the family's standard of living.

Finally, since the nursery opened at Lugsi, we have seen a change of attitude on the part of both men and women. The children's parents have begun contributing in a variety of ways.

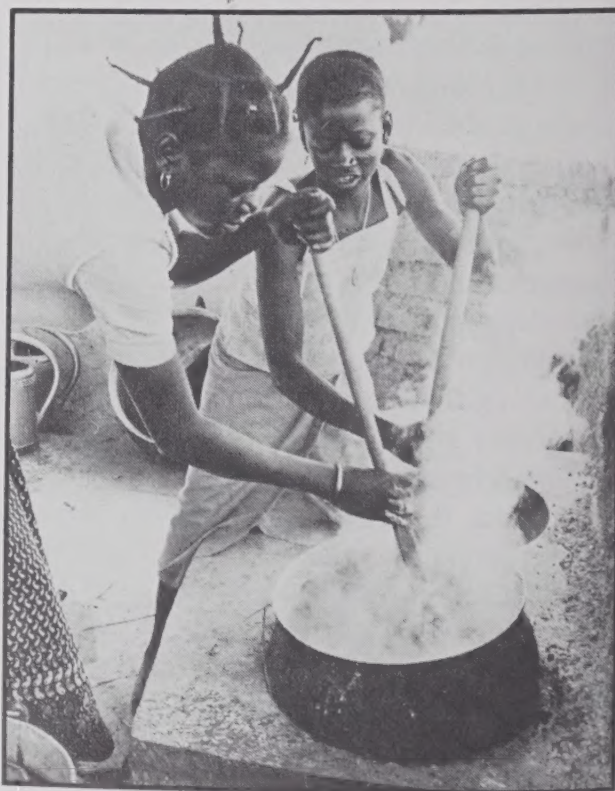
How did you recruit the staff to run the centre and what does the training programme consist of?

Ms. K: The instructresses were chosen by the villagers themselves from among the village women. There are nine of them—a woman of about forty and eight young women of between 18 and 20 years of age.

As for their training—they were taught the meaning of the concepts of pre-school centre, day nursery, nursery school, crèches, etc. They took courses in nutrition, home economics, literacy, hygiene, first aid, teaching and psychology. They took part in arts and crafts sessions. They were also asked to do their own research into traditional games, folk tales, songs, etc.

Now tell us about the children, how they are chosen?

Ms. K: The first children were chosen in September 1980 just before the centre



Mothers help run the canteen in turns for the Lugsi pre-school centre. UNICEF 639/83/Upper Volta/Murray-Lee

opened. To be eligible, each child had to have a birth certificate, be between three and six-years of age and have paid a CFAF 300 (less than US\$1) registration fee for the month of October. From November to January, the parents give the equivalent in food; from February to June, they pay CFAF 150 a month. The members of the centre's committee are responsible for its finances. A total of 80 children were registered the first year for the three levels. The next year, there were 102.

The month of May is reserved for refresher training for the staff. The children spend the whole day in the nursery and a school canteen functions with the help of Cathwel (an American agency which supplies foodstuffs). The mothers also help run the canteen by taking turns bringing seasonings and firewood and doing the cooking. A school garden and a farm provide vegetables, eggs and meat for the canteen.

What influence has the Lugsí pre-school centre had on the children?

Ms. K: At the educational level, we see marked differences between the children who attend the nursery and those who don't. For instance, the centre's children have a wider vocabulary, they are more alert and curious, their powers of recall are more developed. One example: the children accurately relay messages from the instructresses to their mothers. They also make sure their mothers answer certain questions.

You can see the children are relaxed. They have learned good habits which make group life easier and help develop their spirit of creativity. They have learned to come into class in an orderly fashion, not to eat outside meal times—they are learning self-discipline.

On the health and nutritional levels, the UNICEF Ministry of Public Health assistance has made it possible to set up basic structures for improving the children's health: a healthy environment (provision of latrines, washrooms and showers); drinking water; sinking of wells; regular medical check-ups; weighing, measuring, vaccination against endemic diseases, and intervention in the event of epidemics.

So one might say that, quite apart from the children, the centre is starting to have an influence on the life of the entire village?

Ms. K: That's right. On the social level the mill we set up considerably lightens the workload of women and has enhanced the quality of the flour as well.

On the psychological level, the pre-school centre has had a significant impact. It has the



The centre is becoming the children's second family. UNICEF 640/83/Upper Volta/Murray-Lee

community's full support and has shown many positive results: good relations between mothers and instructresses; good relations between the men and the women in running the centre and carrying out certain tasks. The pre-school centre is becoming the children's second family, a common meeting ground for instructresses and parents to discuss things together and impart and receive information and training; certain taboos and prejudices are becoming less pronounced.

The village of Lugsí is becoming open to new ideas and to development activities. In the future, the centre will no doubt help to partially resolve the problem of emigration.

At the economic level management sub-committees have been set up at every level for the well, garden, infirmary, farm, mill, and so on. This makes the peasants take on

more community responsibilities. For instance, the keeping of an account book is an important new development for the villagers.

What are the prospects for the future?

Ms. K: On the institutional level, Upper Volta must devise a clear policy with regard to pre-school education. The confusion between pre-school and primary school sometimes hinders the progress of certain activities and prevents them from being put to careful and effective use.

It is precisely within this context that UNICEF is planning to finance the creation of fifteen pre-school centres in the next two years. Outreach work has been done in the villages concerned and some of them have even finished the building work already.

The strength and the originality of this experiment lie in its ability to get people together, old and young, men and women, to rally around a single objective: children, the adults of tomorrow. □

“Love him and mek him learn”

Children in school are a captive audience. In the parish of St. Thomas, Jamaica, they are being taught how to help bring up their own younger brothers and sisters. Parents, teachers, and children are responding well.

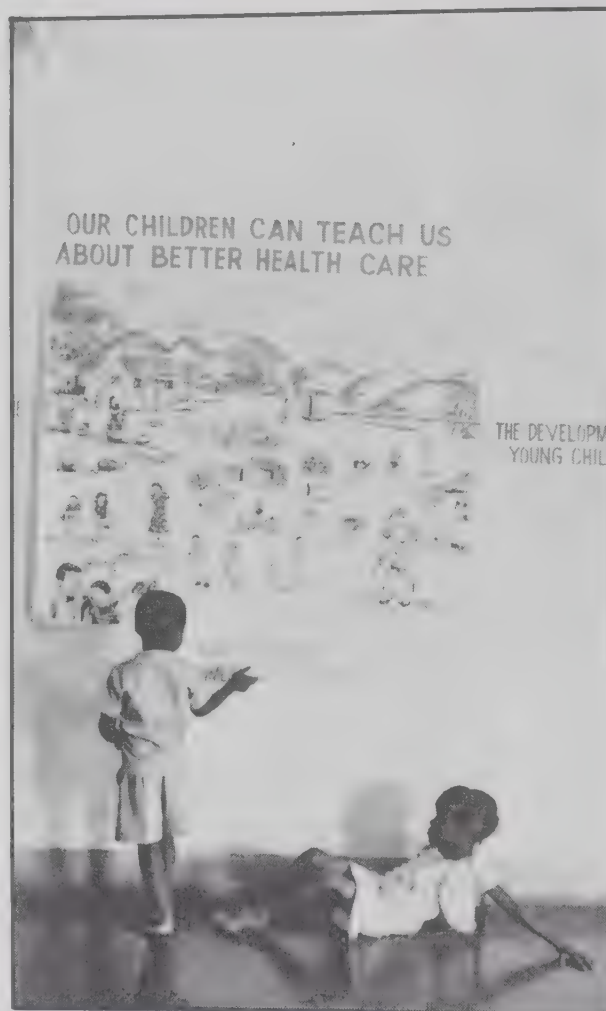
St. Thomas has long been regarded as one of the parishes in Jamaica most susceptible to poor health and the outbreak of disease. Many families live in extreme poverty with poor standards of housing, and face other environmental problems which affect the physical and mental development of their children.

Since February 1982 a joint programme involving UNICEF, the Ministries of Health and Education, and the Tropical Metabolism Research Unit (TMRU) of the University of the West Indies, has been making inroads into those conditions. Primary school children are at the heart of the programme, taking part as change agents in a teaching approach which departs from the usual primary school tradition.

Jennifer Knight, the Project Director, describes the results after one year as “very encouraging: we are getting there slowly but surely.” The story of the St. Thomas project is, in very large part, the result of her hard work and dedication. Indeed, her indefatigable enthusiasm seems finally to be attracting the attention of the Ministry of Education, with which the programme’s long-term prospects rest. According to Jennifer Knight: “Our long term goals are to integrate child health and development, and improve parenting skills throughout the country.”

The project is based on the assumption that all aspects of children’s development – social, emotional, intellectual, health and growth – are strongly influenced by their environment, including the quality of child-

This article has been edited by Claire Forrester, a Jamaican journalist, from a paper written by Jennifer Knight, Director of the St. Thomas project.



Children are themselves seen as agents who can affect home health practices. Photo: Cunningham

rearing. Parents’ practices in hygiene, child-feeding, and adult-child interaction in the home, all affect children’s development.

In St. Thomas, parents of very poor children do not have the right knowledge about hygiene and child feeding. They also fail to appreciate the importance of play. So children often fail to develop to their physical and mental best. In addition, health and social services are often inadequate at present, particularly in remote rural areas.

According to Jennifer Knight, the St. Thomas project took a new approach to solving these problems by using primary school children. Initially, the programme involved seven primary schools in the western part of the parish and later extended to the eastern side, gradually encompassing all the primary schools in the parish. The children were taught basic child rearing practices, focusing on hygiene, child-feeding and child development.

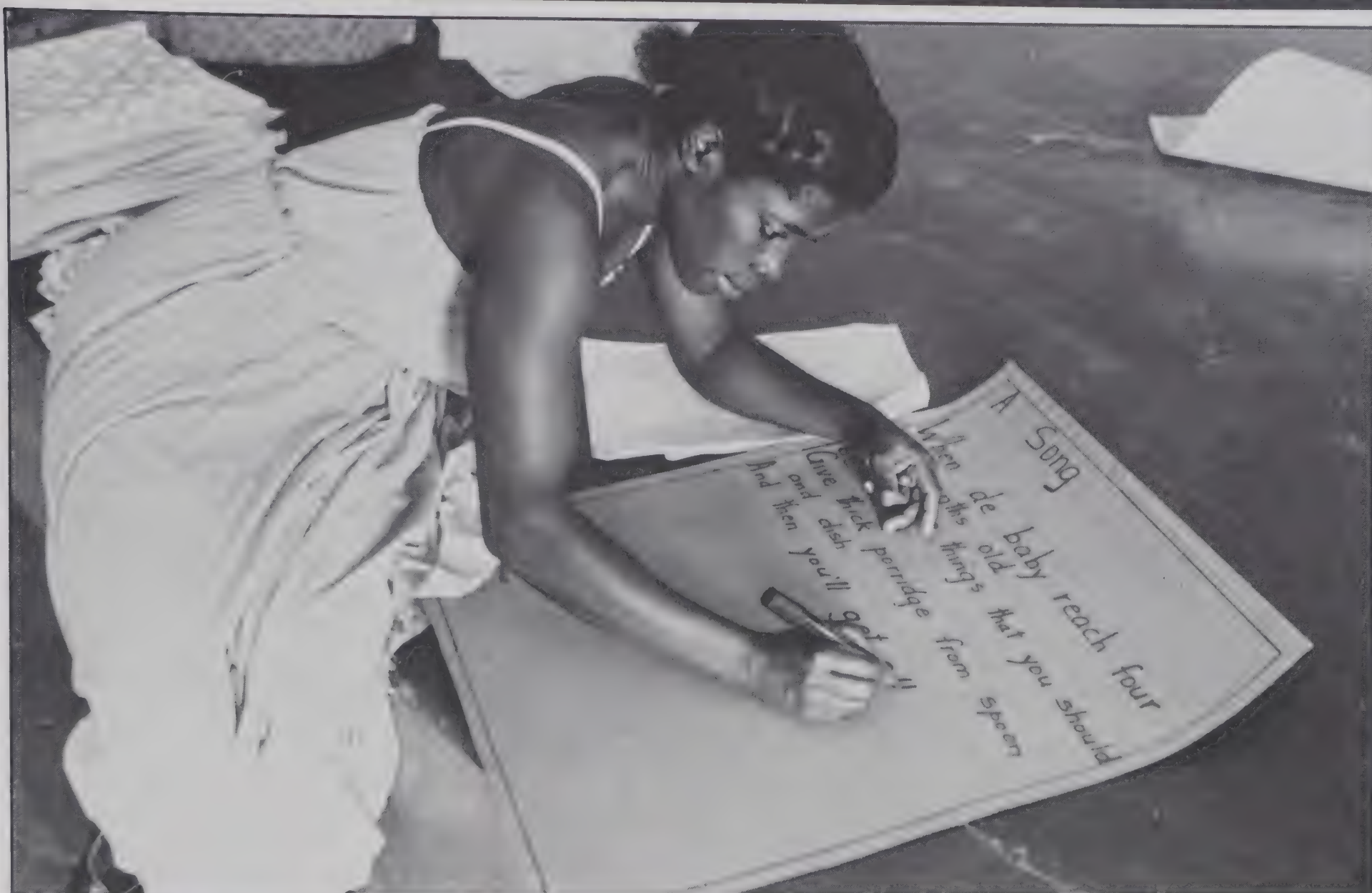
Another objective is to help the school children become good parents in their turn, and to improve the care received at present by younger siblings. Even the parents’ knowledge and skills can be improved by their children. And the programme also seeks to improve teachers’ knowledge.

The idea is to use the educational services to promote the health of the community.

Children themselves are agents of change

In most Caribbean countries, primary school education is free. Schools have in the main only been used for traditional educational purposes. However, primary schools are a natural channel for services aimed at improving the health and development of young children. They present a captive audience of older children who can be used as agents of change. Large families usually have children whose ages are spread over a wide range, and older children are expected to share in the care of the younger ones. In addition, Jamaica recently introduced compulsory education, which has helped to improve school attendance. Teachers are very respected members of the community.

Initially, working with children in Grade IV (9-11 years old), the programme concentrated on teaching three main topics: young child nutrition; promoting a healthy and safe environment; and child development.



Two weekly workshops were conducted with 14 teachers from grade levels four and five, for one school year. Teachers were given detailed lesson plans with ideas and activities. They were encouraged to develop these and to discuss the children's response to the lessons. Modifications were made to ensure that lessons were easily understood and enjoyable. Much discussion took place on health problems, and measures they could use to solve them.

The approach stressed participatory activities for the children rather than didactic teaching, stimulating the children's interest, and motivating them to take home child health messages to their parents and to look after their younger brothers and sisters more competently.

A series of songs and jingles was compiled, using folklore music and the Jamaican dialect, emphasizing all the important child health and development themes. Pictures were designed, which the children coloured and took home. Mindful that the reading level of both the parents and the children was poor, the messages were largely pictorial although a few simple words were added.

Jennifer Knight reports that the project implementors found a higher level of illit-

Active and participatory learning through songs and jingles teaches children about health and development. Photo: Cunningham

eracy in the schools than anticipated but encountered a wide range of abilities among the children. Accordingly, only very basic child health and development messages were used in the curriculum, focussing on preventive activities.

Food for growth

In the first semester, children were taught about the importance of food for the young child's growth, especially in the early years when children grow rapidly. The following lines from one of the songs sharpen the point:

"When de baby reach four months old
There are things you should be told
Give the thick porridge from a spoon
and dish
And den you will get all that you wish..."

The values of breast-feeding the child at the right time was also emphasized. The chorus of the same song brings out the message:

"She get di breastmilk

(day and night)

She get it for a year

(oh yes)

She never get sick

(oh no)."

They were taught when to introduce porridge, how to serve food to the young and when to introduce the baby to the family pot:

"She can eat foods from de pot

(at six months)

All de vegetables fruit and meat

(one, one)

All de mashed foods, fish and peas

(oh yes)

Mek sure dem all nice and clean

(ooh yes)."

In the second semester, the children were taught how to make their environment a safe and healthy place to live in. These lessons emphasized that germs caused diseases; that certain insects and animals carry them; and showed how mosquitoes can be controlled.

Jingles also focussed on personal hygiene and proper food preparation:

"Germs like dirt

And garbage too

Germs will make you sick

Keep germs out

Germs like food

Dirty hands too."

The third semester covered child development. Children were taught that the young child develops in stages and that praising young children was an important ingredient in teaching them:

"Praise him when he is right,
Then he will be bright,
Love him everyday,
And this is what I say,
Praises mek them learn,
Never to be too stern."

The educational value of play and toys was also stressed as well as the correct pre-reading and writing procedures for the young child.

Regular visits

The schools were visited regularly by the project implementors and lessons were observed. The children appeared to enjoy all the activities. Many children made toys for their younger siblings, took home pictures to show their parents and carried out suggested activities at home. Parents signed letters saying that the children had completed specific activities, giving an indication that messages were reaching home. In one school, if a lesson was missed, the children would chant: "We want child care, we want child care."

Teachers were asked what they thought of the programme, and some said that it improved the children's attitude and motivation, and created good class participation even from shy children. Others said that it helped the children to come to terms with daily life and helped the school child to take care of the younger ones and to understand how the younger ones developed. They said that the songs, skits and jingles were particularly enjoyable, and an effective means of communication.

Parents and guardians said that the programmes helped children not only to take care of themselves, but of other children. They liked the way the children were taught how to feed the baby, avoid diseases, and get rid of germs and dirty things. Some said that the children taught the adults about baby care and better health habits.

Responding to the favourable results which have been received to date, UNICEF has decided to continue the project for a further three years, taking in the parish of St. James to the northern side of the island and some schools in Kingston. UNICEF hopes that the Ministry of Education will take up the challenge of fully integrating the programme into the official school curriculum. □

Madagascar

Getting an earlier start

In Madagascar parents used to consider pre-school centres either a luxury or a baby-sitting convenience. But the government has now launched its own programme of country-wide pre-school education, both to increase women's access to the job market and to enhance the development of the under-fives. By MICHAEL GRIFFIN.

"The Child is Father to the Man," wrote Wordsworth, expressing the view that what occurs in infancy profoundly affects the way in which we look at the world as adults. The moulding of our abilities and sensibilities begins long before the lengthy process of formal education.

Mlle Rakoto Noro, who has been working with Madagascar's pre-school programme since its inception during International Year of the Child in 1979, is in passionate agreement.

"The early period of a child's life is the most important," she insists. "Adults are concerned with water supply and modernization and so on and think that children don't count until they are six years old and start going to school. The largest part of our work is to show people the importance of the first few years, to show how much education occurs at this age."

It is this kind of thinking which is behind Madagascar's increasing commitment to the development of a country-wide pre-school programme. A remarkable and adventurous experiment under the auspices of the Ministry of Population — whose mandate includes the welfare of mothers and children — is now underway in ten pilot centres throughout the island.

More than most African societies, Madagascar offers considerable scope to the working woman, married or single. The country was ruled by a series of autocratic queens until 1897, and women are now active in government, management and

commerce. High rural area illiteracy rates notwithstanding, they constitute more than 40 per cent of university students.

Development of a national programme of pre-school education stemmed initially from the government's commitment to increase women's access to the job-market, to make it easier for them to be both mothers and bread-winners. But the way in which the programme evolved owes as much to that as to a commitment to enhance the lives of the under-fives.

Erratic standards

Madagascar's provincial capitals have long provided a choice of day-care facilities



"Parents skeptical of pre-school in time begin to notice a flowering of their children's personalities." Photo: Griffin

Michael Griffin is a freelance writer based in Madagascar.



for parents who could afford them. But standards in these institutions were erratic; many served merely as "baby sitting" centres.

"UNICEF gave us another idea: that one could do a great deal without parents having to pay as much as they do in private centres," says Ms. Monique Andreas, director of today's national programme. "It made us aware that there existed methods and techniques that we could afford."

The programme began when ten teachers were sent to neighbouring Mauritius in 1981 to meet UNICEF's pre-school consultant Cyril Dalais, and to closely examine the island's thriving network of parent-supported pre-school centres.

In Mauritius, the teachers were introduced to the idea of using local materials — both for building construction and for the making of teaching aids. They saw cast-off rags, wood, raffia and even household "rubbish" such as jars, plastic containers and boxes being turned into puppets, dolls and jigsaw puzzles.

The biggest eye-opener of the study-tour, however, was to realize how parents themselves could help in the day-to-day running of the centre, thus cutting overheads and the share of costs which they would need to pay. Parents can cultivate gardens to provide vegetables for the midday meal. They can also carry water, clean rooms, cook lunch and assist in the classroom, eliminating the need for ancillary staff. With this kind of help, and imaginative use of local materials, pre-school centres need not be an expensive luxury.

The Ministry then opened three pilot centres in each of Madagascar's six provinces, locating each in a distinctive 'milieu' or environment: a village community, an urban area, and near a factory or pre-cooperative. In all cases, the programme was directed toward serving the poor who until then had never dreamed of sending their children to pre-school. The object of the experiment was to find out in which environment, and using which methods, the pre-school could eventually become self-supporting.

Among the parents excited about the potential of pre-school centres is 29-year-old Justine Rasaorimainana. She lives in Laniera, a village of red-roofed houses and rice fields set among marshes barely 15 kilometres from the capital of Antananarivo. Justine has borne six children, two of them now dead. Her broad, friendly face smiles easily, but just as quickly resumes that patient, brooding look that many Malagasy mothers wear. Life is difficult in the

'We must sensitize the people'

A two-week seminar to look at the pre-school programme's progress was held in Antananarivo recently. Participants included officials from the ministries involved in the programme, among whom were six UNICEF-trained supervisors, one for each of Madagascar's *faritany* (provinces). MICHAEL GRIFFIN made use of the seminar to ask some questions of Mlle Rakoto Noro, a sociologist involved with the programme since its inception. Excerpts from the interview:

The idea behind the pre-school centres is that they should one day become self-supporting. But if the people of Laniera cannot agree on renting a rice field for US\$4 a year, isn't it going to be hard for them to find the teacher's salary?

Mlle Noro: You're right to be concerned that supporting a teacher will be too heavy a burden for the peasants. But let me give you another example. A community opens a school centre and there is a teacher, a volunteer perhaps, and the parents of the children pay the teacher. However, the salary is not the same as that paid by the state in the pilot centres. That's an alternative formula, an agreement between the teacher and the community.

For most mothers in less developed countries, pre-school education is regarded as something of a luxury. Isn't there a danger in introducing a very ambitious, modern and helpful idea without any real certainty that the need thus created will be satisfied?

Mlle Noro: It's exactly for these reasons

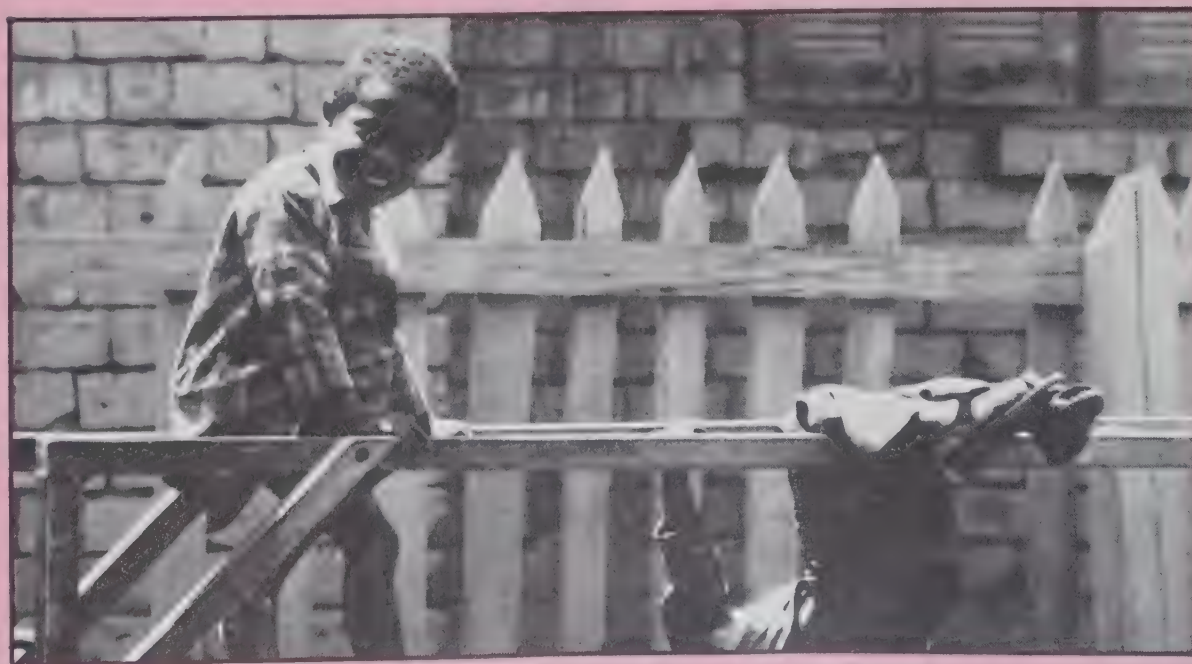
that we introduced pre-school education in village centres, near work places and in populous, urban areas — in order to find out if it can work. That's why the vegetable gardens, the chicken runs, are established near the centres, why we encourage the parents to become involved in helping at the centres. I can't really tell you if the people are going to support the idea yet. We'll only know after five or six years.

Does pre-schooling address the real needs of the parents? Don't they have other priorities, such as an adult education centre, or a new house for a midwife?

Mlle Noro: I agree, they might need a new midwife's house. But is it better to have a house for the midwife, or a centre where children can be introduced to health care, learning and proper feeding? Our type of pre-school is meant not only to educate the children, but also to introduce them to proper health care. It will be an integrated centre where we can satisfy *all* the needs of children.

For a long time, people had the habit of thinking: midwife, primary school, hospital. But the young children, what happens to them? It's they who end up in hospital. If they were well fed, and if their health was a matter of genuine concern, they wouldn't end up in hospital. For too long, children of this age have been neglected. The largest part of our work is to make people aware of the early needs of children.

"For too long, the needs of young children have been neglected." Photo: Griffin



countryside: Justine and her family were among 120,000 people who had to be evacuated in 1982 when floods destroyed the rice crop.

Every day, Justine goes to the irrigation canal to look after the geese and ducks while her husband works in the paddy field. Before the pre-school centre opened here in 1981, Justine would carry her small daughter to the market every Thursday when she went to sell geese or a tray of bluish duck eggs. Now the little girl is one of the centre's 35 pupils, all children of local rice-growers.

The rice-growers provide the centre with many essentials. Food is derived from a half hectare rice-field, a kitchen garden and a neat creosoted poultry coop built in the centre's yard. The rice field was rented last year from one of the parents, who also sowed the crop free of charge. Last year's crop, however, was not enough to see the centre through the year, so today a parents' meeting has been called to try to expand the field and to collect the 2,000 MGF (US\$5) rent.

The centre's watchman, another parent, appears to speak for all when he says that expanding the field is too much work. Justine, the only woman to speak, argues vehemently with him. "No one else is going to work for us," she says. "What we are being asked to contribute is for the benefit of *our* centre."

Sociologist Amedee Ranoasiarison, whose role in the meeting is to elicit support for the centre and to try to encourage the parents to take further initiatives, is sanguine about the future of the rice field, but realizes that "sensitization" of the parents is hard work.

Not a self-identified need

One of Amedee's main difficulties is that the parents still have difficulty with the idea of a "self-help" pre-school centre since it was not a need that they had identified for themselves.

"The willingness to work is still missing," he says. "If their life depended on it, they'd do it, but at this point it requires a leap of faith."

Justine echoes these sentiments: "Those who don't send their children here, they don't think there's any point. On the contrary they try to discourage the ones whose children do come to the centre. They say they learn no more here than they do at the fire-side. They don't study and they don't work."

A new centre was also opened recently in the spa village of Ranomafana near the southern city of Fianarantsoa by Veronique



Children playing shop at the Manjakary pre-school centre. Photo: Griffin

Raharison, a teacher who completed her training about a year ago. It hasn't been exactly plain sailing, but she can at least report a distinct change in the parents' attitude.

"At first, people didn't like sending their children here because they did nothing but play," she says. "Later they could begin to see that there was a purpose to this play and that the games and the little model shop had a point. In time, they actually began to notice a flowering of their children's personalities."

Similar interest has been visible in the Sandratra—"Awakening"—pre-school centre in the working class area of Isotry in Antananarivo, a bustling district of weather-beaten houses and open drains where the children play in the mud. The 60 pupils of Sandratra are children of maids or laundresses or of women working next door in the pre-cooperative, which produces sanitary towels.

The population of Antananarivo is expected to double to 1.6 million in 14 years and it's in deprived districts like Isotry that most of those new citizens will find shelter. A glimpse of the 'boutique', where children play at shopkeepers and customers, gives a poignant reminder of the poverty of the area. In Laniera, the shelves are lined with neat rows of cigarette packets and empty tin cans. In Isotry, the only things "on sale" are a pair of biscuit boxes and some penicillin

containers.

At various times of the day, mothers, all of whom work locally, pop in to visit their children, to help with a lunch of fried banana or boiled rice, or to clean the classroom. And the centre has been inundated with requests for places from other mothers. Isotry, however, is a long way from self-sufficiency. Most mothers earn only 400 MGF (US\$1) a day and the Laniera type of contribution is beyond their means.

"The rural centres have had more success," said programme director Andreas. "People listen more in the countryside and when they see you have given something, they become more responsive. It's also easier for country people to help because they can contribute a share of the sweet potato harvest or a chicken and there is land for them to work."

The Madagascar pre-school programme, like its charges, is still in its infancy. In two years, ten of the proposed 18 centres have been opened and success has varied from province to province, and from milieu to milieu.

In some centres, even after such a short while, parents are on the point of taking the first step towards making their centre self-supporting. In others, the centre is already being viewed as the stimulus for a wide range of differing but linked activities such as adult literacy, nutritional guidance, and family planning. And in still others the first, faltering steps toward an independent, low-cost system for nurturing children to the age of five have yet to be taken. □



Thailand

New words from the temple

Every day, in the morning and the afternoon the temple loudspeakers in Maeha village broadcast health and nutrition programmes. Watana Tunwai, a Village Health Volunteer (VHV) thinks the messages are having an impact. By DIANA SMITH.

Village health workers in two villages of northern Thailand are finding that their jobs have become much easier since the local temple loudspeakers began broadcasting daily health education programmes.

Boworn Buttawajana and Sawat Pankeon, graduates in adult education, are living in the villages for four months and broadcasting daily programmes from the temple. They hope their loudspeaker programmes will have a major impact on health and agricultural development.

Local health volunteers say that increasing people's knowledge of disease prevention in this way is bound to have an impact. Watana Tunwai, one of the four Village Health Volunteers (VHVs) responsible for the 119 households in a village called Maeha 5, says that the reason for much of the poor health in the village is ignorance.

"It seems strange to think that a child's malnutrition has been caused by ignorance rather than by shortages or poverty, but I am certain it is often the case," she says. Recent research showing the strong correlation between a mother's education and her child's nutritional status support Watana's views. She thinks it will be possible to put over the essential messages of health education by loudspeakers, which she can then reinforce through personal contacts.

The Thai Government is willing to recognize the imperative of health education in poor rural villages. Watana Tunwai is one of the 35,000 VHVs to be trained since 1977 in a country-wide programme. Over 230,000 Village Health Communicators (VHCs) have completed a shorter and simpler training programme.

Although this training achievement is

remarkable, those trained are often too inexperienced to work without constant support and stimulation from more senior health professionals. It will be some time



Mrs. Thaiwatananont, who introduced village broadcasting in northern Thailand, amuses the children. UNICEF 645/83/Thailand/Smith

before they will have the confidence and experience to be effective on their own.

According to UNICEF, the drop out rate for those trained is very low — probably around six per cent; but the "do nothing" performance is as high as 30 per cent or more. Many of the health communicators merely transmit simple messages — such as where the malaria office is or when the immunization team is coming — to the 10 to 15 families for which they are responsible.

The VHVs have a longer training and are therefore more likely to discuss health issues. But many of them are reluctant to discuss certain subjects like family planning or personal hygiene unless explicitly called upon to do so by the villagers. Some find all their time taken with giving out basic drugs, first aid for wounds, fractures and burns, and organizing child weighing sessions.

The poorest children are not necessarily malnourished

In the meantime, loudspeakers which provide regular reminders of the VHVs' and VHCs' new messages confer an authority and back-up, according to Watana, which she finds they badly need.

She has seen 20 cases of child malnutrition during the past six months among the 440 people of Maeha 5 where she lives and works. She has told many of the mothers about the need to supplement their children's rice with beans when they cannot afford meat. There is no shortage of beans in the village: they are grown immediately after the rice is harvested. Watana says that her advice has been taken, and that proof that it can be done is provided by the evidence that children from some of the poorest families never suffer from malnutrition.

However, Watana has only a limited amount of time to spend on her VHV work, and therefore she can only deal with a few families at a time. She is also aware that if she wants to make a success of her drive against child malnutrition, she will have little time for other aspects of health education. In the future she may have ten or more VHCs working with her in the village, but until that happens she is fully stretched.

Without the help of the broadcasting system, Watana feels much less would be achievable. "Without the discussion and community action in the village created by the loudspeaker programmes, there would

Child survival: some prerequisites

Female education



Mother and Child

Children's health is closely linked in the poorer communities to their mothers' level of education. Even within the same socio-economic group, children with more educated mothers have significantly better prospects for health and survival. Education helps determine a mother's exposure to new information, and makes her both more willing and more able to take advantage of new thinking and innovations.

Whether a mother will go for a tetanus shot, have a trained person helping with the birth, know about and be able to use oral rehydration solution for a child with diarrhoea, or be aware of the advantages of breastfeeding, all depend more upon her education than any other single factor.

Education & mortality

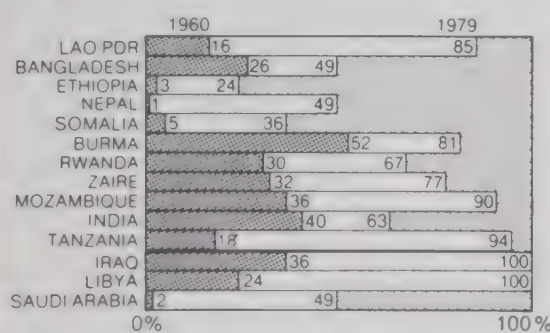
Deaths of children under 2 (per 1000) by education of mother in Latin America

	PARAGUAY 1972	COSTA RICA 1973	COLOMBIA 1973	CHILE 1970	DOMINICAN REP. 1975	ECUADOR 1974	EL SALVADOR 1971	BOLIVIA 1975
None	104	125	126	131	172	176	158	245
1-3	80	98	95	108	130	134	142	209
4-6	61	70	63	92	106	101	111	176
7-9	45	51	42	66	81	61	58	110
10 plus	27	33	32	46	54	46	30	
COUNTRY	YEARS OF SCHOOLING							

Educating the world's women

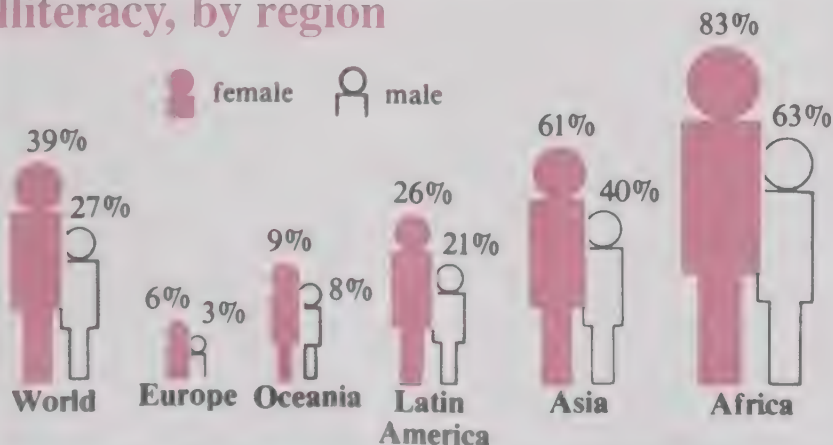
In parts of the developing world, there is resistance to the idea of female education because of the inevitable social changes it fosters. The cost of education also hinders women's access to it, as does the fact that schooling deprives families of the domestic labour girls traditionally performed. Nevertheless, tremendous strides have been made in school

Percentage of girls enrolled in primary schools, 1960-79.



enrolments in developing countries: in the poorest half of the world, school enrolments for girls between 6 and 11 years of age had risen from 34% in 1960 to almost 80% by 1979. As the chart at the left shows, in some countries they have actually tripled or quadrupled.

Illiteracy, by region



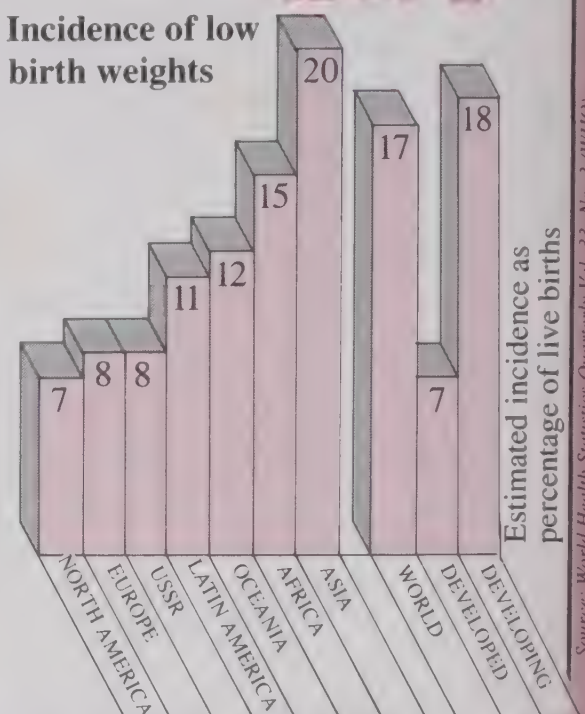
Food supplements

Avoiding low birth weight

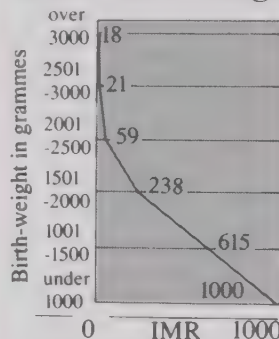
Low-birth-weight babies (below 2,500 grams) account for about one-third of all infant deaths. As the table below shows, deaths rise rapidly as birth weights decline. The principal cause of low-birth-weights in the developing world is malnourishment in the womb, mainly because the pregnant mother is malnourished. Research has shown that relatively low-cost food supplements of just a few hundred calories a day for chronically – but not acutely – malnourished pregnant women could reduce infant deaths related to low birth weight by over 50 percent. Other researchers have concluded that iron, folic acid and food supplements for pregnant women are the single most cost-effective means of reducing perinatal deaths.



Incidence of low birth weights



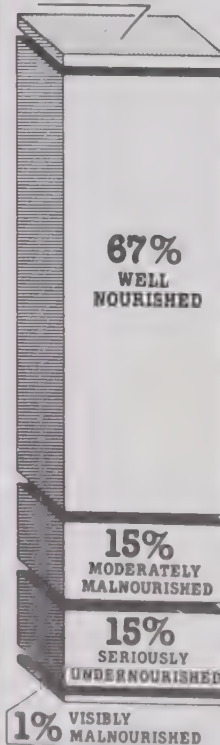
Infant mortality & low birth weight



Note: Figures for New Delhi, India, 1969-1974

Note: Low birth-weight = infants weighing 2500 grammes or less at birth

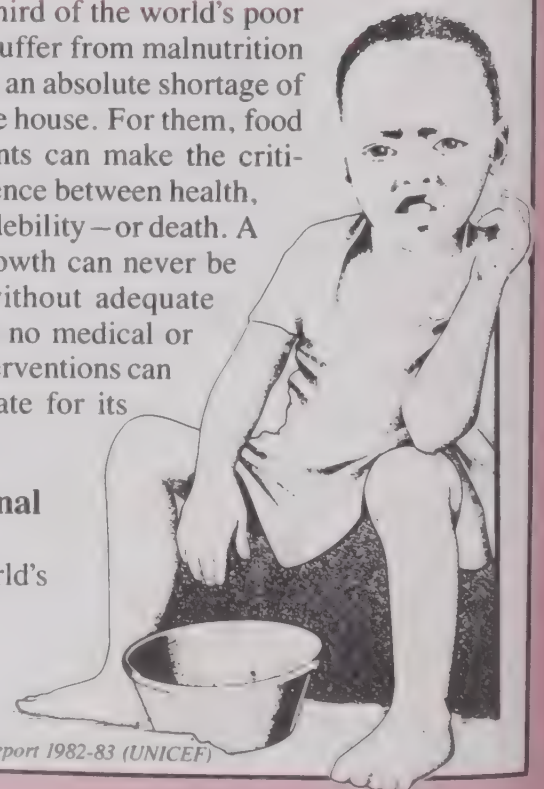
2% OBESE



The children's need

About a third of the world's poor children suffer from malnutrition caused by an absolute shortage of food in the house. For them, food supplements can make the critical difference between health, life-long debility – or death. A child's growth can never be normal without adequate food, and no medical or health interventions can compensate for its lack.

Nutritional status of the world's children



(ALL FIGURES EXCLUDE CHINA)

Source: SWOC report 1982-83 (UNICEF)



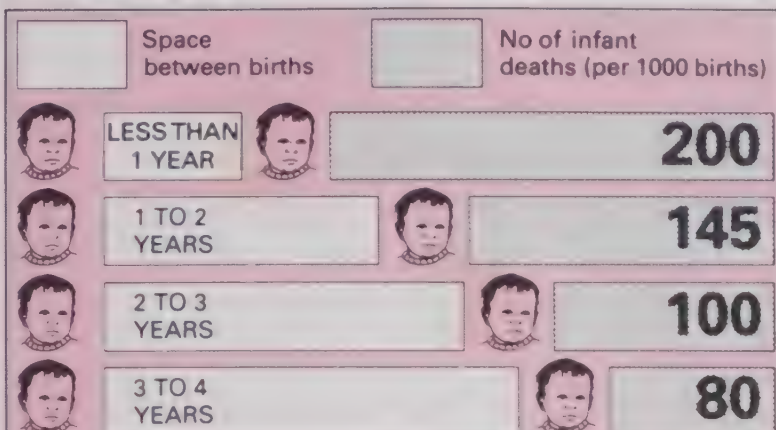
Birth Spacing



Delaying births & conception

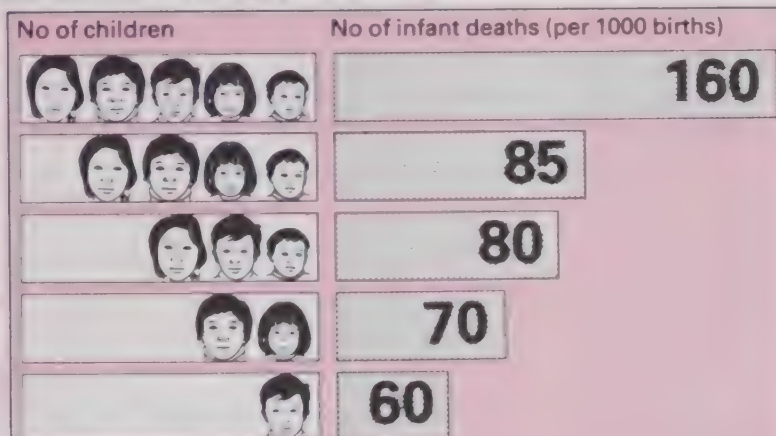
Among the critical determinants of child health and survival are the number of children a woman bears, the age at which she bears them, and the interval between births. The rapid spread of family planning has provided widespread evidence that birth-spacing can have a revolutionary impact on both maternal and child health. Family-spacing as a concept is more readily understood than family planning because most traditional cultures had devised means to delay conception through practices such as extended breast-feeding and polygamy.

TOO CLOSE Too short an interval between births steeply increases the risk to both mother and child.



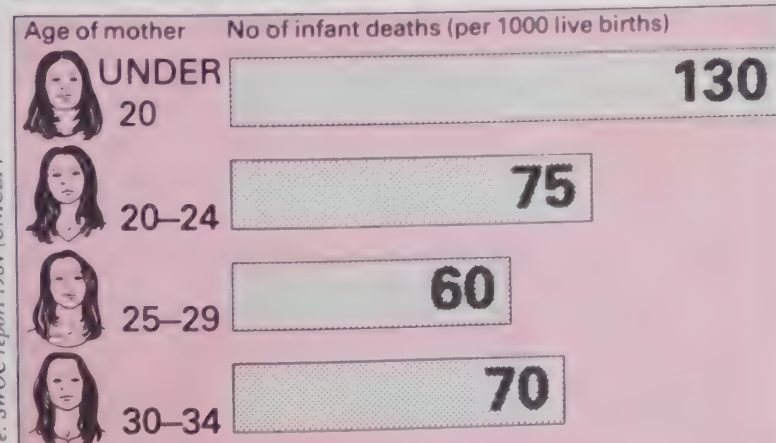
From a WHO survey of over 6000 women in South India

TOO MANY The risks to the health of both mother and infant increase steeply after the third child.



From a survey in El Salvador

TOO YOUNG Children born to women under the age of 20 are approximately twice as likely to die in infancy as children born to women in their mid-20s.



From a survey in Argentina

Measuring results: IMR

Eloquent indicator

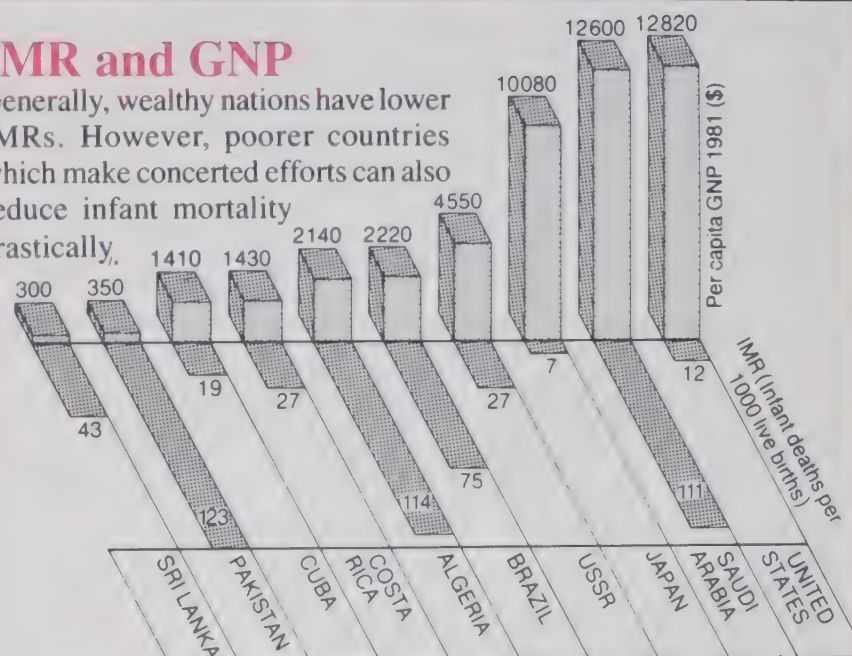
A country's infant mortality rate (IMR) is one of the most eloquent indicators of its development. It is also a very effective way of measuring the success of programmes designed to improve child health and survival. The UN goal of reducing IMR (which indicates the number of infant deaths per 1000 live births) to 50 or less in every country by the end of this century is unlikely to be met.

Infant mortality rates, 1960-1981

	1981	1960
CHINA	41	170
KENYA	80	140
CUBA	19	70
INDIA	120	170
NORWAY	8	19
HUNGARY	21	48
ETHIOPIA	150	180
KUWAIT	33	90
BANGLADESH	130	160
MEXICO	50	90

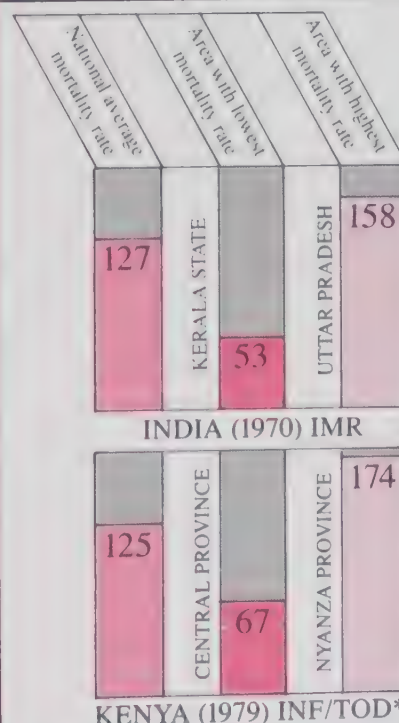
IMR and GNP

Generally, wealthy nations have lower IMRs. However, poorer countries which make concerted efforts can also reduce infant mortality drastically.



Differences within nations

Two things to bear in mind when interpreting IMR figures: in most countries, especially the poorer ones, the data is always approximate — nations, rich or poor, keep better records of how many washing machines are sold than of the health status of their children. In addition, national IMR figures can sometimes obscure disturbing divergent trends within a country: as the table on the left shows, IMRs in some regions can be three times higher than in other regions of the same country.



Note: *The infant/toddler mortality rate is the number of deaths before age two per 1000 live births.

Source: SWOC report 1984 (UNICEF)



be little impetus for improving health standards. I can do a little to stimulate ideas, but in order to really get things going everyone must be thinking and talking about the issues all the time."

Congregating around the temple

The broadcasts go out for an hour and a half in the morning and for two hours in the evening as the villagers are coming back from the fields. The programmes are

offer such discussion groups.

All the groups which have been set up so far relate directly or indirectly to feeding, which seems to be a priority interest in the villages. "So far the villagers have chosen agriculture, food preservation, cooking, nutrition and child care as subjects for interest groups," says Boworn Buttawajana, one of the graduates working on the health education broadcasts. The programmes have concentrated heavily on nutrition. Watana is convinced that nutrition is the most important topic, and that the women



Teachers broadcasting health programmes for a Buddhist temple. UNICEF 646/83/Thailand/Smith

generating considerable discussion. People come out of their houses and congregate around the temple when they expect a broadcast to start, and chat among themselves both before and after.

The four organizers hope to stimulate "interest groups," so that people get together to discuss topics of special interest and learn from each other. Mothers who have the skills to produce balanced diets from very small incomes clearly have a great deal to

are picking up a lot of useful information.

Until the loudspeaker broadcasting started there was very little material about new agricultural or health ideas circulating in the village, and few opportunities to discuss such issues. The local government health officer, the one person who is employed to provide health education, makes only a very small contribution. The villagers complain that he is hardly ever in the village, preferring to spend time in the northern provincial capital, Chiang Mai, which is only 27 kilometres away. When he is around, his time is taken up with curative medicine, since he has a supply of medicines

and is able to prescribe oral contraceptives and give injections.

There are a number of radios in the village which could be a source of information on health, diet and farming, but according to Intong Intarawero, the Buddhist monk who runs the temple with the loudspeaker system used for the broadcasts, few people listen to their radios. "I feel much more optimistic for the future of this village now that the people here are showing such interest in the loudspeaker broadcasts," he says. But he also feels that news from the outside world would help people understand the suggestions for better farming and the need for a better diet.

The village was also devoid of reading materials before the teachers arrived. There were no newspapers, no books and very little interest in either. UNICEF estimates that within three years of completing primary school in Thailand, 30 per cent of the students become functionally illiterate, with a higher percentage for young girls and women.

But the effects of the broadcasting system and the teachers' activities in the village should help, at least in the long term. Almost the first thing they did when they came into the village was to set up a reading centre in a small thatched roof hut just outside the temple.

Inside are literally dozens of used magazines and comics which have been collected from friends and colleagues in Chiang Mai University. On the walls are posters about balanced diets and clean water, as well as a couple of "wall newspapers" telling in cartoon form the importance of birth spacing within the family, and the benefits of cleaning teeth. The reading centre is very popular, particularly with the children.

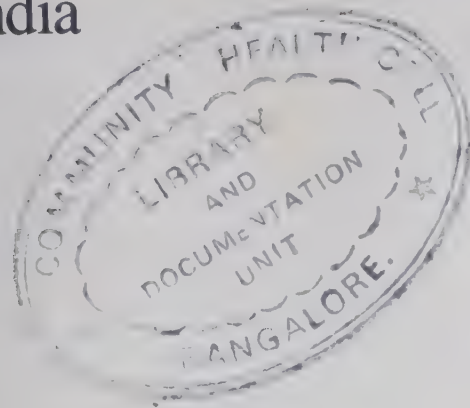
Mrs. Pranee Thaiwatananont, who trained the students of Chiang Mai University and who heads the functional adult education extension programme, pioneered the first reading centre four years ago. She said the idea caught on fast.

Pranee later introduced the loudspeaker educational system in temples in poorer villages of northern Thailand, convinced of the important role it can play in extension education. She sees teachers in rural and adult education as leaders and administrators in all aspects of development.

Chiang Mai University now produces teachers who are able to get health and development messages through to the villagers in a form which is greeted with new energy. □



India



Winning marks for good health

COMMUNITY HEALTH CELL
Main, 1 Block
Koramangala
Bangalore-560034
India

One advantage of the *anganwadis* — “child care courtyards” — established by India’s Integrated Child Development Services programme is that children gain an early confidence in their capacities. But the *anganwadis* are also having an impact on community health and sanitation. By ANNE CHARNOCK.

Healthy baby competitions have become major social events in the slums of Vadodara in Gujarat. Proud mothers parade their children before the judges in the expectation that the chubbiest child will win. But the judges — community workers from the city corporation — award marks not only for weight, but also for cleanliness and for each child’s immunization record.

These competitions are fun, and they are also part of national programme to improve health among India’s infants: the Integrated Child Development Services (ICDS) scheme.

ICDS operates through *anganwadis* — literally, “child care courtyards” — in rural and city slum communities. The *anganwadi*, serving around 1,000 people, is the focus for immunization and health education programmes, for giving extra meals to underfed children, and for administering dietary supplements to expectant mothers. The nucleus is the pre-school for children up to six-years-old, for playing, learning, feeding and caring, run by a local *anganwadi* worker and her helper.

The *anganwadi* workers receive four months’ training in child-care, and are also taught how to explain to other women in the community — most of whom are their friends — the causes of illnesses, the importance of hygiene and environmental cleanliness, the purpose of immunization, and how to fill in growth charts.

Since ICDS started as an experiment in 1975, the scheme has expanded rapidly from 33 to 200 of India’s 5,000 administrative blocks.

Vadodara is already seeing concrete

Anne Charnock is a freelance journalist who regularly contributes to New Scientist.



Anganwadi workers build children’s confidence through playing, singing and dancing. UNICEF 641/83/India/Charnock

results after just three years operation. The success of ICDS in this area undoubtedly reflects the tradition of social awareness in Gujarat — inspired in large part by Gujarat’s most renowned citizen, Mahatma Gandhi. The local ICDS team has set up 100 *anganwadis* to date, with nearly 20,000 mother and child beneficiaries. There is now an air of excitement, with the project poised for expansion to 160 *anganwadis* covering the entire slum population of Vadodara.

The pre-school children show most visible improvement. As one *anganwadi* worker, Chandanbhen Thakker, explains:

“They now turn up looking better, their hair combed and fingernails clean.” The incidence of severe malnutrition has also receded. The number of children suffering from third and fourth degree malnutrition has been halved during the past two years, to 607 cases out of 16,513 children.

The problem of blindness caused by Vitamin A deficiency seems to have been eradicated. No new cases have been reported this year — a cause of some pride among ICDS workers in Vadodara.

Immunization has also shown its effects. The incidence of polio has fallen below the national level, and there have been fewer cases of neo-natal tetanus, a notorious cause of infant deaths in India. Immunization coverage for whooping cough, tuberculosis and diphtheria (DPT) is improving. Earlier families failed to turn up for booster shots, so now mothers are visited individually by the *anganwadi* workers or their helpers.

“At present our most serious health problems are measles and diarrhoea,” says Dr. Atul Shah, medical officer for the entire project area. “Measles is endemic here, and reaches epidemic levels in March and April when an average of four or five children die each month.” In 1981, only 200 children were immunized against measles because of a shortage of vaccine, but says Dr. Shah: “We have just received enough vaccine to cover all the children under two years of age.” Within two months the immunizations should be complete.

If their immunization records are winning Vadodara’s babies good competition marks and good health, their chances of catching a bout of diarrhoea infection are just as high as ever. Within the past three years there has been no reduction in the number of cases, for which viral infections are thought to be the principal cause.

Diarrhoea’s ill-effects could be treated by oral rehydration, but local women have no knowledge of this treatment. So *anganwadi* workers have been explaining how a simple



mix of salt and sugar can save lives. "We've already started giving oral rehydration packages which contain 40gm of sugar and 3.5gm of salt which is then mixed in a litre of water," says Dr. Shah.

The weak point is sanitation

Sanitation and public health are probably ICDS's main weak points, but the Vadodara team intends installing 20 inexpensive,

water-seal, pour-flush toilets in selected pre-schools as an experiment. The design is by India's "latrine guru," Ishwarbhai Patel, who operates his *Safai Vidyalaya*—Cleanliness School—from Gujarat's capital, Ahmedabad. Finding a site for these toilets is a major obstacle because many slums are sited illegally on private land.

Better nutrition is also an important concern. According to Mrinalini Doctor, Vadodara's child development project of-

ficer, who oversees all work in the project area: "There are certain wrong beliefs about weaning foods which have serious consequences. All our cases of severe malnutrition are children under the age of two. Solids may not be introduced until a child is a year old because mothers are waiting for the child to start walking. So we're trying to tell the mothers about weaning foods—what kind of food babies can eat at six months, and so on. Gradually they are accepting

A random survey

An assessment of India's ICDS scheme, based on a random survey of 16 projects, was carried out during 1983*. Questionnaires were sent out, asking for information on demographic data, the attitudes of beneficiary families, and the degree of interaction between the *anganwadi* and the community.

By 1985, according to the report, ICDS will be providing 10.3 million children with immunization and health check-ups; 6.1 million children and 1.1 million women with supplementary nutrition; and 3.4 million mothers with non-formal education.

Annual recurring costs of ICDS amount to 0.66 per cent of public sector budgets and according to the report: "Considering the vital role of ICDS in improving the quality of life and stimulating change at community level, the resources allocated to ICDS are insignificant. There is scope both to extend the coverage of the scheme, and to allocate more resources to each project, to increase effectiveness."

However, while pointing out many merits in ICDS, the assessment sees considerable room for greater efficiency:

- Beneficiary families, local communities and *panchayats* (village councils) must be brought into the programme in a more organized manner;

- Small villages with less than 1,000 people are being bypassed, even though many are very poor;

- Attendance is very low at functional literacy classes because women seem more interested in learning money-making skills.

- Only 62 per cent of children from poor families attend the pre-schools, inhibited by the fact that they have no proper



Anganwadis provide pre-schoolers with a constructive alternative to roaming the slums.
UNICEF 642/83/India/Charnock

clothes, even by village standards.

On the success side, the report found that the *anganwadi* pre-schools have been successful in removing important disparities between rich and poor. Only the rich can afford preparatory schools. Many children from poor families fail in school, or quickly drop-out. The *anganwadis* help to alleviate this disparity, and also break down social barriers because children from different castes mix freely with others.

While the pre-schools are working 'reasonably well' with children showing normal levels of cognitive development, the report noted that the children's personal hygiene is generally poor and only a third of surveyed pre-schools had toilets.

Health coverage has improved with immunization increasing from less than 20 per cent to 50 per cent. But there is a high drop-out rate for vaccinations administered in series. Mothers are aware that health care and immunization are generally "good" but do not make the vital connections between immunization and disease, or child growth and malnutrition.

A 'perceptible' change in attitudes was found towards family planning. Nearly 60 per cent of families are in favour of family planning and the majority favour three children.

ICDS involves extra costs over previous child welfare schemes because of the new *anganwadi* infrastructure. But the assessment concludes: "The important point is that, considering the benefits generated by ICDS in offering a co-ordinated package of services, the extra cost appears quite meagre." □

**Integrated Child Development Services Scheme—An Assessment. Prepared for UNICEF by Dr. K.G. Krishnamurthy and Dr. M.V. Nadkarni.*

these ideas." Recipe demonstrations show local women how to prepare food so that nutritional value is not wasted, and also suggest ingredients that are cheap but nourishing.

Taking the strain

Vadodara's ICDS team has recently started giving a one-day training session to the *anganwadi* helpers. The effect is dramatic, as one helper, Punjibhen Hiralal, explains. "Before being trained I did not understand the project, I was just like a servant. If I advised someone in the community they would say: 'What do you know?' but now I am trained, they listen to me. I can go from house to house, and explain about the importance of cleanliness. I explain what our paperwork is for, why it is important to weigh their children and why this should be done every month." Punjibhen, and helpers like her, can take some of the strain off the *anganwadi* worker.

Each *anganwadi* worker is trained to recognize common illnesses and the specific danger-points of each one. She can give minor treatments, but if a danger-point is reached, she must refer the case to a nearby hospital as a matter of urgency, without waiting for Dr. Shah to come on his rounds. Sometimes the *anganwadi* worker will drop all her work to take a child to hospital.

Regular checks are made by Ms. Doctor and her staff to ensure that the *anganwadi* workers understand the referral system. "We ask, for example, 'How to give such and such tablets, and what are the danger signals for a child with diarrhoea?'" There are workers who need constant guidance and coaching from the project's six supervisors. In addition, the ICDS team has six auxiliary nurses who are assigned a number of *anganwadis*, and are mainly employed for their midwifery experience.

It is the children's long-term future that the *anganwadi* is most concerned about. Where there is no pre-school, youngsters tend to roam around the slums and pick up bad habits. Later, they have great difficulty adjusting to the norm of behaviour expected in the classroom.

The informal atmosphere of the *anganwadi* pre-schools is a gentle introduction which builds up the children's confidence through playing, singing and dancing. As Ms. Doctor points out: "Many have become very attached to their *anganwadi* teachers. It's when these children become adults that we'll feel the full impact of the programme."

Burma

A millstone around their necks

A new kind of injection is protecting the village women of Burma against goitre, whose unsightly swelling and dangerous consequences for the unborn are the object of a special health campaign. By SAMPHE LHALUNGPA.

Their infants slung in shawls on their backs, the women wait patiently outside the Naung Nan Rural Health Centre. According to what they have heard in the village, a team from Rangoon will be visiting, bringing a cure for goitre.

On almost every neck there is the distinctive swelling. Goitre is an iodine deficiency condition that results in a swelling of the thyroid gland. This ranges from a nearly imperceptible bulge to large lumpy sacs of tissue, disfiguring and dangerous.

Waiting with them is a young woman whose layered hair style and modern blouse would pass muster in downtown Singapore. Only the red welts that run the length of her neck mark her out as a resident of this village in Kachin, Burma's most northern state. This young woman has also come to see if the team can help to check the slight swelling on her neck.

The angry red welts are tell-tale signs of the age-old Kachin coin-rubbing treatment. The healer holds the coin between the thumb and forefinger and rubs the afflicted parts with the edge until the welts begin to appear. It is the first resort of many who feel the first thickening of goitre on their necks.

The goitre team made up of a UNICEF staff member, an international consultant on goitre control, a communication consultant, Department of Health doctors as well as health educators, are visiting Naung Nan to see the extent of the goitre problem in Burma and study how people deal with it in their communities.

The team studied how people in selected communities in endemic areas — more than 10 per cent incidence — responded to a "cure": iodinated oil injections. Though this

Samphe Lhalungpa is a PSC Officer in UNICEF's Rangoon Office.

treatment is more in the nature of prevention than cure it does stop the growth of large goitres and may cause small ones to subside.

The team found the communities quite willing to accept the injection. In Naung Nan the women's wait was rewarded; they were the first of 270 people in the village to receive the shots.

Over the next four years in villages throughout goitre endemic areas, similar scenes will be replayed as injection teams displace the skin-twisting agony of the coin-rubbing treatment with the momentary prick of a needle.

These teams are part of a four-year, US\$4.2 million project in which UNICEF is co-operating with the Government of Burma. Aimed at preventing cretinism and controlling goitre, the project will initially cover six townships and reach some four million people in 95 townships.

The campaign's principal targets will be children from birth to 15 and women in the 15 to 45 child-bearing age group. The dosages of 0.5 ml for infants and 1 ml for others is considered adequate both to replenish the body's iodine store and provide protection against goitre for up to five years.

Traditionally thought to be a highland disease, goitre or "laybingyi" as it is known in Burma, is principally found in an arc that runs from the Chin Hills to Kachin State, the Shan State and Kayah. But, as if to confound conventional wisdom, pockets of goitre are also to be found in the Magwe and Sagaing Divisions — the heartland of Upper Burma.

The consequences for the unborn

Goitre seems to affect women more than men, an easily observable fact in any goitre endemic area. Though not immediately



life-threatening, its consequences for the unborn make goitre an insidious condition. As women go through pregnancy they need more iodine. The thyroid works harder to extract what it can from an already deficient diet, which results in the swelling.

Lack of iodine can also increase the chances of mothers giving birth to a cretinous child. Cretins are deaf, mute, and mentally deficient. The condition is irreversible and its social consequences profound.

The campaign will therefore have a vigorous health education component that will stress the connection between goitre and the lack of iodine as well as that between goitre and cretinism. At present both these connections are not made by the people.

Cretinism or variations of iodine deficiency conditions are to be found in many of the hyper-endemic areas. Almost every village has the sometimes drooling, stunted figures, limited in their mental abilities and—if not hidden away—consigned to the most menial tasks.

As well as these tragic consequences, there are other more mundane effects of goitre. One 50-year-old man said: "I get tired very easily and sometimes it affects my breathing"—classic symptoms of the disease.

Younger women say that as men increasingly prefer to marry women without goitres, they have begun to regard goitre as ugly and to be avoided. According to a local doctor, this is in sharp contrast to their mothers, for whom goitre was almost an accepted fact of life. It caused little comment or undue concern, and so long as the woman was unhampered in the course of her daily life, she did little to seek relief, unaware of the hidden and long term effects of goitre. But values are changing and notions of beauty with them. Nowadays the fashionable young woman is worried about a slight swelling which her mother might not even have noticed.

Today, apart from coin-rubbing, many people also seek relief at the operating table. According to the surgeon at the Myitkyina hospital, goitre patients come from many miles down the railway line—as far south as Mandalay—for the operation. But the surgeon's knife does not always bring relief. The goitre can grow again.

The iodinated oil will buy time. Five years, during which salt consumption and distribution patterns can be studied and plans made for the eventual processing and distribution of iodized salt. A previous attempt at salt iodization, successful in bringing about a dramatic drop in the in-



Children injected against goitre are spared the disfiguring—and dangerous—effects of goitre. Photo: Wishnetsky

cidence of goitre, was hit by the decontrol of the salt trade.

Before the injection programme starts, township medical officers will attend workshops to learn how to train and manage

the injection teams. During training, they will be introduced to injection techniques and reporting procedures, and provided with health educational materials.

If all goes well, many people in Burma will find respite for five years at least from what seems to them a millstone around their necks. □

Bangladesh

Vitamin A: a short-term solution

Night-blindness, caused by Vitamin A deficiency, is a serious problem in Bangladesh. UNICEF is helping distribute VACS—Vitamin A capsules. But a better diet is the longer-term answer.

By S. KAMALUDDIN.

Nutritional blindness or xerophthalmia grips Bangladesh to an alarming extent. At least 25,000 rural children under six years of age go blind from this vitamin A deficiency disease each year. About 12,000 of these children survive, but are blind for the rest of their lives.

Large scale prevalence of xerophthalmia or *raat kana* (night blindness) as it is commonly known in the country, was first identified during the 1962-65 Nutrition Survey of East Pakistan (as Bangladesh was then). It was estimated that about 5,000 children in the under five years age group were going blind each year. However, no active programme was taken up to attack the disease, and the situation continued to deteriorate.

According to Professor Kamal Ahmad, Director of the Institute of Nutrition and Food Science, vitamin A deficiency became more widespread during the liberation war in 1971. His view is that nutritional blindness increased and "many thousands of children perished".

The World Health Organization conducted a survey in 1972-73, and estimated that at least 17,000 children were going blind each year due to vitamin A deficiency. They therefore assisted the Bangladesh Government to launch a blindness prevention programme with the active support of the United Nations Children's Fund (UNICEF). The programme aimed at distribution of high potency (200,000 IU) vitamin A capsules (VAC) every six months to all rural children under six years old.

Although the programme was developed in response to an emergency situation, it has continued for more than 10 years and

UNICEF is committed to support it until 1986.

The target population for vitamin A capsule distribution is between 18 and 20 million. Procuring capsules is costing UNICEF between US\$800,000 and \$900,000 each year. This is one of the most important UNICEF-supported programmes in Bangladesh.

Reports indicate that about 50 per cent of the target population has been reached with VAC. The programme has successfully reduced the incidence of nutritional blindness from 17,000 in the early 1970s to about 12,000 a year now. However, a lot more needs to be done.

A recent Xerophthalmia Prevalence

Dhaka school children receiving Vitamin A capsules for blindness prevention. UNICEF 643/83/Bangladesh/Khan



Survey was carried out jointly by the Bangladesh Government, the Institute of Public Health and Nutrition, the Bangladesh Programme for the Prevention of Blindness and Helen Keller International. "Vitamin A deficiency is the final common pathway" said the Report, but added: "nutritional blindness cannot be viewed solely in the context of an isolated nutrient deficiency. There is evidence that the measles virus, for example, may be responsible for corneal destruction when nutrition is poor. The total food economy of the household and the child, as well as exposure to diseases such as measles and gastroenteritis, needs therefore to be taken into account."

The xerophthalmia prevalence survey has also showed that rates for non-corneal and active corneal xerophthalmia were all lower among the rural children who received a VAC. But about 30-40 per cent of the children developed xerophthalmia even after receiving VAC.

Nutritional blindness is preventable, says Nancy Terreri, UNICEF Health Programme Officer in Dhaka. The disease is caused by the lack of vitamin A in the body. So, more food rich in vitamin A should be taken by all, both for curing and preventing the disease.

Bangladesh grows in abundance a large number of vegetables rich in vitamin A content: sweet pumpkin, sweet potato, beans, and carrot, for example. Seasonal fruits like mango, jackfruits (also used as vegetable while green) and papaya are also grown in large quantity and are easily obtainable.

In addition, two varieties of small fish, locally known as Mola fish and Dhela fish

S. Kamaluddin is the Bangladesh correspondent of the Far East Economic Review.



and available everywhere, contain a remarkably high percentage of vitamin A. Barely two inches long, each Mola fish contain 520 IU of vitamin A. Three of these fish are enough to meet the daily needs of vitamin A of any young child. The lack of vitamin A in the body of the infants and children could be substantially improved if mothers were to grind boiled Mola fish and feed them in a mix with milk or rice.

VAC distribution cannot be a long-term solution for meeting vitamin A deficiency. The answer lies in meeting the body's vitamin A needs by eating the appropriate foods. But it seems that rural children hardly eat any green leafy vegetables because of their price, although many of them eat some fish with their rice.

The majority of the rural poor are landless peasants, and depend on selling themselves as day labourers. Vegetables in the market place are relatively expensive and are normally beyond their pocket. Certain other varieties of vegetables grow in abundance almost anywhere in this fertile country and do not cost much. But they are not eaten because of lack of knowledge about food and food values. Normally, people eat rice, sometimes with potato or fish and pulses.

Health Assistants and Family Welfare Workers who distribute VAC in the villages report that the mothers are not aware of the importance of a balanced diet. Most mothers do not feed green, leafy vegetables to their children, believing that these are unsuitable for any young child's diet. However, with the gradual spread of knowledge through the visits of field workers over time, opinions seem to be changing somewhat. But progress is, indeed, very slow.

To help the rural people understand the importance of a balanced diet for themselves and their children, the Bangladesh government has taken up a number of projects with financial support from UNICEF. One of these is to distribute seeds and encourage people to grow vegetables in their backyard.

UNICEF Programme Officer, Mr. A.K.M. Ashraful Alam says that under the three-year seed distribution programme (1982-85), a total of 100,000 packets of 12 selected varieties of vegetable seeds will be distributed to the villagers. About 5,250 people—half of them women—from 42 selected villages throughout the country have been trained for intensive production, conception and conservation of vegetables. This will help them grow their own vegetables to meet part of their food needs, and is also likely to make them conscious of changing their food habits. □

Indonesia

Getting it together for children

The pre-school child—the *balita*—has long been the focus of many social welfare programmes in Indonesia. Now a new programme, with the acronym BKB, is being piloted in three locations in Java and Sulawesi. Health nutrition and intellectual stimulation in the home are being addressed at one and the same time. By WARIEF DJAJANTO.

The scene is the *balai kampung* (community hall) of a low-income neighbourhood in the village of Kuningan in Central Java.

In one room, Bu (Mrs.) Mardiah Nachrowi is explaining to a group of 15 mothers how playing with a simple wooden toy can help stimulate the intellectual development of their children. In a room nearby, Bu Sri Susetyowati is talking about nutrition to other mothers of one- to two-year-olds. Using colourfully illustrated flip charts, she underlines the importance of certain foods which can help children gain weight steadily.

Once Bu Mardiah and Bu Sri are done, the two groups join together for a talk on traditional medicine by yet another community educator. Bu Dul demonstrates how to make an herb-based itch-relieving ointment by grounding *ketapang* leaves with sulfur, onions, salt and coconut oil. Does the ointment work? Nobody has an itch to put it to the test!

These women have come to learn and to share experiences on how best to raise their pre-school-age children—the *balita*, as they are known in Indonesia. They are participants in a pilot project known as the *Bina Keluraga dan Balita* (BKB) programme for comprehensive child development.

Altogether, 225 mothers of low-income families are participating in three BKB projects; the two others are in West Java and South Sulawesi. The idea is to promote the healthy development of the *balita* through

integrating previously separate health, nutrition and educational services.

Commanding her subject matter

Bu Ijah is a *kader* (extension volunteer) for a group of mothers with children from two- to three-years-old in the *kelurahan* (village) of Jagasatru in West Java. She plays a significant role in carrying out the different aspects of the BKB programme for the 75 mothers who attend the weekly meeting at the community hall.

This is a low-income neighbourhood of small traders, drivers and office clerks. The women learn about all aspects of child development, how to observe children in the learning process, and how to identify specific problems, such as why a child is crying.

Bu Ijah is an experienced extension worker. She is also a nutrition volunteer and a family planning motivator. Herself a mother of seven and a grandmother of 12, her shrill voice and command of subject matter capture the attention of the mothers despite the distractions created by their restless children.

"Bu Buun, how do you tell your child what to do?" she asks a mother.

"By speaking gently. By coaxing."

Bu Ijah turns to another mother. "Bu Serna, what is the difference to you before and after joining the BKB?"

"Before coming here, I didn't understand much about children. Now I understand more, and my child likes to play with friends." Other mothers tell of children helping with housework and eating properly at

Warief Djajanto is an Indonesian correspondent for the *Depth News* service of the *Press Foundation of Asia*.



Koraimangala

Bengaluru 0034

India



the table.

One of the mothers in the Jagasatru programme is Bu Fadillah, 22. It was through a chance encounter with a passing neighbour, Bu Nur, that she became involved. "I asked where she was going, and she told me about the programme. It got me interested and I went along."

Becoming "right" children

Bu Fadillah spoke clearly and simply about what she thinks joining the programme means for her two sons, Aziz Fauzan aged three, and Abdullah Maskuri aged one-and-a-half.

"I want to know the ways to educate my children so that they become responsive to their parents, devoted to their parents. I want them to become right children and not naughty children."

By "right," she means that they should eat properly, stay healthy, and have proper manners, knowing how to greet guests according to the local custom, for example.

The family is not well off. Bu Fadillah's husband, Pak (Mr.) Syaifuddin, 27, is a tailor. He works at home with his three sewing machines. They live in a humble, five by two-and-a-half metre shack of woven

Indonesian pre-schoolers are profiting from an integrated child services programme. UNICEF 644/83/Indonesia/Danois

bamboo, for which they pay Rp. 25,000 (US\$25) a year. The floor is packed earth, and when it rains the cracks in the tile roof let in the water and the floor becomes muddy. The front room is cramped with the three sewing machines at one end and a double iron bed at the other. In the middle are a couple of plastic chairs and a wooden cabinet topped with a 13-inch black and white TV set.

The back room, separated by a torn cotton curtain from the front room, consists of a wooden bed without a mattress and a cooking area. A common bathroom is shared with a neighbour and situated a distance away. Water is available from a community water tap.

Pak Syaifuddin works on his sewing machine, while Bu Fadillah does most of the talking.

"Yes, I'm practising family planning," she says. "I want to have a daughter later on when my two boys are bigger."

What does Bu Fadillah want her children to grow up to be? "I want them to be educated, of good character, and have them

go to university, God willing, if there is money."

A direct benefit of the programme is the opportunity it affords for getting to know other mothers and become socially involved outside the home, which helps to build their self-confidence.

The mothers also learn how to interact more meaningfully with their children in their daily chores. They are taught the importance, for example, of speaking with the child at every opportunity, including when he or she is being cleaned or washed.

The BKB programme represents the recognition that health, nutrition and other services need to be integrated in order to contribute properly to a child's well-rounded development. In addition, these services must be complemented by those which address the children's needs for intellectual and social stimulation.

The BKB programme represents Indonesia's commitment to the welfare of its 21 million children under six-years-old. To underscore this commitment, the programme was launched by President Suharto himself. The pilot phase is expected to be concluded in 1984. The ambitious goal is to reach all of the country's 62,000 villages by 1994.

Children: sensitive barometers

Sang Kancil is a legendary character in Malaysian fairy-tales, popular with children. This name is now attached to a programme that may in time become as well-known, and as popular, among Malaysia's mothers and children. By FOONG PETO.

The squatter women have learnt to speak for themselves. At *kampung*—community—meetings, they are not only seen but heard. A few years ago the presence of these women was unthinkable: the men made all the decisions and the women stayed at home. Now they have learnt to sign their names on cheques, do a little accounting, bring home money, and try to maintain a new-found "career" and family.

They have more time now that their children are studying in pre-school centres nearby. The women are happier knowing their children are learning the 3R's. Who knows: one day their children might make it away from the slums?

Health is better too now that nurses are around once a week to talk to them about nutrition, breast-feeding and family planning. The children are no longer afraid of the strange women in white as they see their mothers asking their advice.

These women and children belong to a programme which is considered a success story in Malaysia. The programme is called after a legendary character, a wily mouse-deer called Sang Kancil, popular in Malaysian children's stories.

Launched in 1979 in conjunction with the International Year of the Child, Sang Kancil has a three-pronged approach to eradicating urban poverty at village level: maternal and child health, pre-school education and income-generating activities. City Hall of Malaysia, the government agency responsible for monitoring the development of squatter settlements, has set up 13 Sang Kancil projects with UNICEF assistance.

Foong Peto, a writer with a Malaysian newspaper, specialises in women's affairs.

Sang Kancil projects are targetted at the urban poor: those living below the MR\$400 (US\$171) poverty line, according to Professor Khairuddin Yusof, the founder and the man who brought Sang Kancil out from the pages of story-books and into the compounds.

According to a survey done in 1978, there are about 48,700 squatter households with 250,000 members. Sanitation and waste disposal is poor in these settlements. Pit latrines are often dug by the squatters themselves and are bordered with wooden walls and covered with *nipah* roofs. Taps are only available in about ten per cent of households. Many people rely on wells or on rain water, collected in tanks beside their houses.

Such environmental conditions are associated with a high risk of contracting communicable diseases, tuberculosis in particular. And the lack of family planning has contributed to a high rate of population growth.

Professor Khairuddin's original plan was to focus on the maternal child health and day-care centres. The health clinics are run by nurses and supervised by doctors. A team of four makes weekly visits to all the 13 centres which cover more than half the squatter house-holds. Health services are not free, though: people must pay a nominal sum of MR\$5 (US\$2.00).

Before the Sang Kancil concept, any health clinic set up by the government was in isolation. The squatter population is quite mobile so that, in time, clinics tended to become abandoned and empty "white elephants." Sang Kancil solved that problem by putting the day-care centres next to the health centres. The nurses can monitor the chil-

dren's growth, and the clinic is assured of a continuous stream of "patients."

Children are the sensitive barometers

The day-care centres with funds from UNICEF cater to children between four and six

Day-care centres allow kampung women an opportunity to earn additional income. Photo: Foong Peto



years of age. Prof. Khairuddin in his report found that children become "a central issue in urban poor families. They are the sensitive barometers of social, economic and health deprivation."

Most of the child care facilities in Kuala Lumpur cater only for the middle class and cost a minimum of MR\$90 (US\$38) per month per child. Low-income mothers resort to enlisting the services of neighbours, or of older children and relatives. Some even lock up their children for a few hours.

These child minders may cater for the child's physical and nutritional requirements, but because of lack of training, provide no intellectual stimulus. In the Sang Kancil day-care centres, the child is well taken care of by trained personnel, and educational materials sponsored by UNICEF enable the child in the slums to have a fighting chance.

Prof. Khairuddin compared the children in the Sang Kancil programme with a control group from another *kampung*. He found that the I.Q. of the Sang Kancil children was about ten points higher than that of the control group. The squatter community, it ap-

peared from the survey, were pre-occupied with education for their children and income for the family. They did not appear to be interested in maternal and child health. So the third prong of Sang Kancil was born: income-generating activities.

At first many people were doubtful that this third prong would get underway, let alone be a success. The women were unskilled, so how could they manage to work at anything that brings in money? *Kampung* society is traditional and chauvinist. Would the husbands allow their wives to go out and work?

It was Khairiah Khairuddin, wife of Sang Kancil's founder, who laid these doubts to rest. Single-handed, she brought out the best in the *kampung* women and taught them that they can earn some money and still devote time to looking after their families. An arts and crafts teacher, she introduced pottery making into one *kampung*, taught the women how to make soft toys in another, and in a third, taught the women book-binding. A company, Kraftangan Sang Kancil, was formed in which all the women were

shareholders.

"The first cheque bounced because the women couldn't sign their names properly," recalls Khairiah. The women originally approached the activities with great reserve and suspicion. In one *kampung*, about 200 women turned up for the initial briefing but when told that the wage would be only MR\$3.50 (US\$1.50) a day, only a handful were interested. And these are the women Khairiah is interested in, "for they are the ones who genuinely need the money."

In another *kampung*, the women were extremely reluctant to give up their jobs. Most were packers in a nearby frozen prawn factory. These women lock up their children the whole day, which means no pre-school or any form of mental stimulation. They earn about MR\$6 (US\$2.50) to MR\$8 (US\$3.40) a day but they lead miserable lives, coming back exhausted to a dirty house, in which they still have to clean, cook the meals and fetch the water from nearby standpipes.

Khariah makes them a better offer. She gives them a half-day's work from 2:30 to 5 p.m. and they can earn as much as MR\$300 (US\$128) a month. She imposes a ceiling rate of MR\$350 (US\$150): "I don't want the women to be earning more than that for then they may neglect their families. You must remember these are women who have never had any money of their own before, so naturally they tend to go a little overboard now that they are capable of bringing some in."

Cik Sasdiah, mother of four children ranging from 18 to 10-years-old, is typical of the women who have listened to Khairiah. She seems happy sewing aprons for soft toys, while she chats and laughs with the 12 other women in the little factory at *Kampung Malaysia Tambahan*.

She earns about (US\$1.20) a day, depending on the hours she puts in. Her soldier husband brings in about MR\$470 (US\$220) a month. It is not enough, she sighs, or else she wouldn't be breaking her back day after day, hunched over the sewing machine.

Still, she seems to be better off than her counterpart in *Kampung Benteng*, Cik Rahmah. A tired looking woman in her late 30s, she has five children ranging from 17 to two months. Her husband, a labourer at the airport, earns about MR\$421 (US\$180) a month. The money, she too complains, is not enough for the large family. Her older children help to look after the younger children while she works at the pottery in the afternoon. It is quite hard work, she says, especially digging for clay at the back of the factory.



Pricing and marketing are the problem

The women have learnt to mark the daily attendance, and record the number of working hours, to calculate their monthly salaries. What the women have not learned are pricing and marketing strategies. Khairiah does all the pricing for their products and finds outlets for their finished goods. She managed to get a MR\$40,000 (US\$1,739) contract from the Malaysian Airline System for soft batik toys. She has fixed outlets for the book-binding factory. But she fears that, if left on their own, "there is only a 50-50 chance of survival for the Sang Kancil women."

Have there been any changes among the Sang Kancil women? They don't think so, but Khairiah does. Many believe in immediate gratification—jewellery, pyrex sets, shopping trips to Singapore. Many of the women also talk about spending more money on food and clothes for the family. But the men grumble. They tell Khairiah that she is disturbing the peace and harmony in the *kampung*, that the women no longer listen to them. They want Khairiah out of their *kampung* so that they can make all the decisions in the family again. But if the men want to run her out, the women invite her to stay behind.

The Sang Kancil project has its fair share of problems. In one *kampung*, the youths were incensed that they were not included in the income-generating activities. Why concentrate on the women, they questioned. After all they are part of the village and if there are funds to be spent, they should also be included. Plans are underway to get them involved in the pottery factory. The preparation of clay, which can be quite a hazardous task, can be done by the men, as can the making of the moulds and glazing. So far, of the three businesses, one is showing a profit after two years, and the others are breaking even.

There are many proposals for expanding the Sang Kancil idea to other squatter settlements in Malaysia. These include management training and quality control for the factories, and government donations of land on which to build more clinics and day-care centres.

Everybody agrees Sang Kancil is sound and viable. Like the crafty mouse-deer in Malaysian folk-lore who can thrive in the jungle despite its diminutive size, it is hoped that the children of Sang Kancil armed with better education, better family income, improved nutrition and health care can do the same in the concrete jungle. □

Kenya

A wider role for birth attendants

Health authorities are once again discovering the advantages of traditional birth attendants. Their services—unlike those of modern health-care institutions—are widely available, even in the remotest communities. In addition, their understanding of local traditions and taboos, and the respect they enjoy, makes them effective health educators. By LINDSEY HILSUM.

Giving a child the best start in life begins before birth—with the health of the mother. How well the baby is cared for and fed during its first few months is equally important to the child's development. And clearly, circumstances of a delivery are also critical.

In rural Kenya—as in most other parts of Africa—traditional midwives still exert considerable influence on these three elements of early life. Known as Traditional Birth Attendants (TBAs), they perform a variety of educational and health-care functions during pregnancy, assist in the delivery and keep an eye on the infant for some time after birth. Increasingly, they are also being involved in promoting family planning.

TBAs are usually elderly women, often with younger women "apprentices" who learn by watching and assisting. According to Mary Memia of the African Medical Research Foundation (AMREF), some TBAs learn their skills from mothers or grandmothers, while others launch their careers by helping out in a crisis. Says Mary Memia: "They learn through experience, and it is this experience that makes them popular in their communities."

Popular the TBAs certainly are. Over three-quarters of Kenya's babies are still delivered at home with their help. Frequently this is because there are no modern health facilities available, but often it is the mother's preferred choice, even when a maternity clinic or hospital is nearby. TBAs are known, respected and trusted, and many women would rather have their children

delivered by them than by a stranger in a white coat.

There was a time when health planners encouraged institutional delivery. But given their limited coverage, such institutions could not possibly cater to the entire populace, and the medical establishment has realized that TBAs are a resource which cannot be ignored. Hence the emphasis on working with them and adding to their reservoir of traditional skills.

Since 1980, AMREF and the Kenya Ministry of Health have held 20 courses for TBAs in Kenya, training almost 400 in all. The courses do not aim to change everything the birth attendants do, but to identify where improvements could be made. For example, many TBAs need to improve hygiene during delivery. The AMREF/Ministry of Health courses show TBAs how they can do this, and how they can prepare a simple delivery kit which includes a clean razor blade (for cutting the umbilical cord), clean string (for tying the cord), and soap.

A two-way street

Mary Memia stresses: "The interaction between TBAs and contemporary medicine is not a one-way street. While it is true that TBAs can learn from modern practices, they also have much to teach modern practitioners." She points out that because they are familiar and respected members of the community, their relationship with the mothers is something an outside health worker might find difficult to emulate.

"Training programmes for TBAs should be viewed as refresher courses, building on

Lindsey Hilsum is an Information Officer in UNICEF's Eastern Africa headquarters.



Singing new songs about breastfeeding

Phoebe Asiyo is the Member of Parliament for Karachuonyo in South Nyanza Province—one of the poorest areas of Kenya. She has actively supported since 1980 a project training traditional birth attendants in Karachuonyo. I talked to her about the project, and about the situation of children in Karachuonyo. Excerpts from the interview:

Why did you feel such a project was necessary in Karachuonyo?

Mrs. Phoebe Asiyo: Because my area has the highest infant mortality rate in this country—over 200 per 1,000—and I just had to get our people to start working on child health without waiting for the government's five-year development plan to be implemented. In my area many children die before they attain the age of two, mainly due to causes that could be avoided—such as bad water. It is diarrhoea and vomiting mainly which kills children here, and malaria is another big killer too.

So how do the TBAs help improve this situation?

P.A.: First of all, they now deliver babies under much cleaner conditions. We have given them kits where they have a Macintosh and a large sheet to put the women on. So the baby drops onto a clean sheet. Then the TBA has antiseptic that she will use to clean the razor blade.

She also has a clean string for tying the cord so there is no risk of infection. She knows how to examine the mothers before birth and advises them to go to the hospital if she feels there is going to be any complications. The TBAs are trained to be able to tell by looking into the mother's eyes, or even at her nails, or by touching her glands or pressing her swollen feet, if there is any abnormality.

How do the TBAs help after delivery?

P.A.: Well, take for example oral rehydration (ORT). Every TBA in my area now has a bottle of boiled water, so that whenever a woman goes to her with a child who has diarrhoea, there is already boiled water. We give them some sugar and salt; they know just how much salt, how much sugar. They start giving the

ORT to the child in the home of the TBA, then they explain to the woman just what to do when she gets back home.

Are the TBAs promoting breastfeeding?

P.A.: Yes. Oh, and what beautiful songs they have about breastfeeding! The message is put across so clearly you cannot make a mistake. In our area it is the school teachers who represent the biggest problem; because they have money they can afford to buy those formulas. Now the school teachers feel very bad about the songs the village women sing, and everybody is coming back to breastfeeding! In that area now it is the taboo *not* to feed your baby from your breasts. Even in marketplaces it is no longer shameful—it is very natural, and a woman who does *not* feed her baby on her breast feels embarrassed.

The problem of refrigeration

What about immunization?

P.A.: We have a mobile clinic working with the TBAs to immunize children. Each baby a TBA delivers she takes to the nearest health centre for all the vaccinations—and, although it is the mother who has the card from the clinic, the TBA also has her own record of what immunizations the child has had.

But our problem is refrigeration. There is one kerosene fridge in the ambulance which goes around the central area, but we have five health centres to which these midwives are attached, and

those centres need their own vaccines with a small cold box to preserve them. That is the one thing giving us a problem, because I have seen quite a number of vaccinated children who have still got the illnesses, which is very discouraging...it means that the vaccines have not been kept cold enough.

Do the TBAs keep an eye on the children's development?

P.A.: The mothers have been made aware to do this: for example, if there are two children of the same age in one village, they are asked to compare the development of these two children to see whether one is definitely too slow, which might mean disability, and to report such slowness. They have strings with which they measure the children—the length, the size of their head and so on.

They have no tapes, because those are expensive, so they make their own strings which they use, and for a normal child they know it should be so much; for a child who is too thin, so much. The midwives give this string to every woman who has a newborn baby and they compare their child with the one next door.

Is family planning known in the area?

P.A.: We use these TBAs who are really respected in the community, whose word

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Kenya M.P. Phoebe Asiyo: "TBAs will help reduce the infant mortality rates in my area." Photo: Hilsum



Mrs. Asiyo

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is law so to speak, to persuade families to space their children. They can do it better than the modern young woman who comes to the village, who perhaps does not know the traditions and taboos of the villagers. These elderly women are able to put across to husband and wife why they must plan their families, why they must space their children, why they must not have too many children.

Do you feel that the project is having some significant impact?

P.A.: I want us to prove in two years that we have been able to save as many as 50 per cent of children who would have died. We are going to prove this because we are keeping very good statistics. Some government departments are even coming to our TBAs to get their statistics. Birth attendants know every homestead—the number of people in the homestead, their ages, how many wives the father has, which wives have had which children, where they are. They are particularly interested in the under-fives and the expectant mothers. If they cannot write, a homestead will usually have a child in primary school who can.

I am hoping someone independent of our operation can carry out an evaluation for us using these statistics.

Do you think that the people feel there has been an impact?

P.A.: I think the involvement of the people voluntarily means there is a real impact. You see, the people themselves come and talk about it, especially the men. Those who were rather difficult in the beginning are seeing changes they have never seen before. I have now come across men teaching family planning and child-care, which is very encouraging.

This project is all about giving children the best possible start in life. What else needs to be done?

P.A.: Food is a very important aspect in giving the child the best start in life, especially good nutrition for the mother and good nutrition for the child. Education for women is a very important aspect, because women with higher and better education do not lose as many children as women who have not been to school. Then there is water, there is agriculture, health...you need multi-sectoral development, everything is linked up. (L.H.)

their existing knowledge and experience," she says.

Modern health facilities have now become essential for "birth trauma babies." Children not getting enough oxygen as they are born suffer brain damage or become epileptic; and tangling of the umbilical cord around the child's neck can lead to mental retardation.

TBAS can learn ways of avoiding such complications. They can also learn to help prevent disability before the child is born. Low birth-weight babies—for example, those weighing less than 2.5 kgs. at birth—sometimes suffer mental retardation and are particularly prone to infection. One of the main causes of low birth-weight is maternal malnutrition. The TBA, who often gives guidance during pregnancy, can encourage the mother to eat better. Similarly, TBAS can help ensure that mothers are vaccinated against *rubella* (German measles), contraction of which during pregnancy can lead to the birth of a deaf or blind child.

But in instances when even the most

skilled TBAS cannot deliver the baby safely—as when the baby's head is bigger than the mother's pelvis—they are taught to refer the mother as early as possible to a health centre or hospital. According to Dr. Frank Njenga, who treats children with disabilities, "the only *new* thing we have to teach these midwives is where they can refer complicated cases." They therefore need to recognize signs of birth complications as early as possible, so that they can refer the mother in good time.

Increasingly, TBAS are being encouraged to check the growth and progress of the babies they deliver. Because the TBA usually knows each mother and each family personally, she is the ideal person to teach the mother how to prevent dehydration when the child has diarrhoea, and to give advice on important subjects such as feeding, weaning and immunization. □

The limited reach of conventional health services has highlighted the strengths of TBAs. ICEF 6730/Kenya/Matheson



Joining the revolution

from page 3

Birmingham and New York had infant mortality rates higher than Baghdad and Dar-es-Salaam do now. But dramatic social gains, led by economic growth and education which brought in their wake more systematic public health measures, saw these rates improve steadily to levels as low as seven per thousand live births.

To say all this is not to suggest that the process of improving children's prospects of survival and healthy development in the developing world has been stagnant. In countries as diverse as Kenya, Chile, China and Malaysia, tremendous progress in reducing child deaths to half or a third of what they were just 35 years ago has taken place. In a few instances, among them Cuba, Costa Rica and Singapore, infant mortality rates are actually on par with some industrialized countries.

Where such improvements have occurred, they were a result of indigenous effort catalysed in part by the new-found freedom in colonised countries and by national campaigns against the major epidemic diseases. A critical role was also played by the revolution in communications and education which accelerated the exchange of ideas and technologies which has always characterized relations between cultures.

Despite the progress, however, infant and child death rates remain unacceptably high in most developing countries. Upper Volta, Sierra Leone and Afghanistan, for example, have IMRs of over 200, compared to Sweden's and Japan's infant mortality rate of only seven. Even more distressing, further quick progress seems unlikely to be easily forthcoming in the face of a deteriorating economic climate. What is politely referred to as the "international recession" has stunted Third World development for the first time in the post-colonial era and given birth to new social and political strife.

Amidst the frenzy and tension of developing societies "reinventing" themselves, to create for themselves in a few decades the level of material and social development which took the industrialized world almost two centuries to achieve, it can be seen that the slow process which shared knowledge and power along approximately equal levels of exchange is neither available nor indeed applicable. What is available has to be discovered—and discovered afresh for every community. While similarities and congruence of needs will abound between



In a sense, one "revolution" has already occurred with the placing of communication at the centre of development planning. ICF 8026/Kenya/Campbell

communities, it is necessary to establish for each population group the means and mechanisms by which they exchange experience and acquire new knowledge.

Misperceptions about "backwardness"

It is the lack of awareness of this slow, evolutionary process which gives rise to the perception (prevalent even in the developing world) of poor countries as being backward and stagnant, their people seen as unable to cope with modern adversity without help from outside. But the fact is that only a small proportion of development taking place in the Third World is (or can be) a result of outside aid. Wherever the "leap forward" has taken place, it has been indigenously ignited. Outside inputs—trade, aid, ideas, scientific advances—have played an important role, but as mentioned earlier, that has been the case throughout history, with nations depending on and using the richness or resources of others to generate their own developmental momentum.

It is to this ongoing process of social development that UNICEF and the other international agencies are seeking to add additional energies and strengths their special perspectives provide. In UNICEF's case, it has meant an opportunity to synthesize lessons from its own long history of

involvement with children's concerns as well as from the work of others, and to see how these might be applicable to the diversity of situations confronting the world's children. Its access to new scientific knowledge in the international community—which interestingly confirms the validity of so much of traditional practice—enables it to suggest options for increasing child welfare which might not be so readily apparent from the perspective of individual countries.

Amongst the most important of the many lessons which UNICEF has drawn is the one relating to the critical role communication plays in development. It has, for example, recognized that it is not the mere diffusion of the effective innovations but the level of their acceptance and integration into the daily patterns of people's lives that determines social gains. UNICEF therefore sees communication as an integral part of the child survival and development revolution. In that sense, a major change has already occurred: for the first time, the communication of information and ideas has been consciously placed at the centre of development planning, and at least on par with provision of goods and services.

Historically, the tendency amongst development workers has been to confuse the implements and symbols of development—whether it be ORS or high-yield hybrid seeds or the hydro-electric dam—with development itself. There has been a certain frenzy sometimes therefore to get the innovations out to the field, as if their provision alone will bring about the desired

changes. The approach was clearly flawed — as evidenced by the failure of so many development programmes — because it did not seek to address the necessity of a transformation in the way people look at themselves and their potential.

Appealing to self-interest

In other words, the focus was not where it ought to have been, on the development of *people*. To quote Tarzie Vittachi again on a different but related subject, "the population 'problem' will be solved not in the uterus but in the brain. People will adopt contraception only when they recognise the need for it, when a change of habit is seen and felt to be advantageous to them as a family and not just because the gadgetry of [birth] control is available." The child survival and development revolution therefore both depends upon, and will help create, profound changes in social attitudes and self-perceptions.

To encourage, utilize and participate in social change, development workers — both local and international — need to undertake a special effort to study the social dynamic of each community. The inability to convince a community debilitated by diarrhoea-induced child deaths to use a life-saving solution is a failure of communication and understanding first of those seeking to propagate the innovation, not of the intended recipients. It is this growing awareness of the central role communication plays in the process of social change that has fueled UNICEF's current drive to locate it at the centre of programming and emphasize programme support communication (PSC) efforts in its operations.

Recognising communication's central role will not of course bring about the end of underdevelopment. Change, especially in traditional societies, has its own pace and rhythm. There are also the structural constraints at both the national and international level which perpetuate inequality and stand in the way of progress. And ultimately, child well-being depends primarily on the level of social and economic development of the nations in which children live.

But changes within these constraints are possible, especially when they are oriented around appropriate and affordable technologies of the kind UNICEF and others are now focussing upon. Development workers therefore have a special challenge to identify and utilize channels through which accelerated social improvement can be brought about. □

India launches Impact programme

On October 2, 1983 — the 114th anniversary of Mahatma Gandhi's birthday — India became the first nation to launch an intensified plan of action against preventable disabilities in response to Impact, the International Initiative Against Avoidable Disablement. Operating under the joint auspices of UNICEF, UNDP and WHO, the initiative will actively promote proven remedies and low-cost measures of prevention.

Impact in India was inaugurated at an impressive Presidential opening at Parliament buildings in New Delhi, and the succeeding discussions produced what is now called the New Delhi Declaration. According to Sir John Wilson, CBE, consultant to Impact, the Declaration "represents a substantial affirmation by a major government of the practicability of the goal of halving the amount of avoidable disablement in the developing world by systematic action mainly at the level of primary health."

India's early response to Impact is not surprising in light of preventable disabilities being a major cause of human suffering and economic loss. Contracted usually during early childhood, these illnesses afflict millions of the country's people. Impact's focus will include efforts to restore sight, movement and hearing to about 15 million victims of curable blindness, deafness and physical impairment as well as wide-ranging action to prevent or mitigate mental anguish. Fortunately, there already exist in India low-cost appropriate technologies to

India's craftsmen and artisans make sophisticated artificial limbs at costs poor countries can afford.
Photo: Balachandran



address many of the needs of the disabled.

Preventative actions will include a campaign to immunize against poliomyelitis — which is believed to be responsible for at least half of the 15 million orthopaedically handicapped Indians — and on the iodisation of salt to prevent the mental impairment which affects at least 20,000 children every year in the sub-Himalayan region.

While prevention is the least expensive and the most effective way to cut down on disability, the scores of already disabled millions call for urgent curative attention. Over 100 mass treatment camps in 16 states were therefore organised in connection with the Impact launch. Preliminary figures indicate that in a period of six weeks at least 30,000 blind, deaf and physically handicapped people had sight, hearing and movement restored.

As Sir John reports, "The unique feature of these camps is that for the first time they brought together technologies gathered from many countries which are capable of delivery at a cost which would be acceptable to a rural or shanty-town community. In such a setting \$8 is the cost of a cataract operation, \$15 for an operation to improve hearing and from \$10-\$25 for an artificial limb.

"I am used to the eye camps but it was an extraordinary experience to see a tympanoplasty operation being performed by a Thai surgeon in rural conditions. At Jaipur, 1,000 orthopaedic interventions were performed using artificial limbs made by village craftsmen. One young girl, who three years earlier had both legs amputated at the knee following a rail accident, literally crawled into the camp and ten days later walked out wearing a new sari and with her new \$25 artificial limbs so well disguised by a pair of stockings that my wife said it was impossible to detect the impairment.

"The impressive thing about this new package of treatments is that if they can be delivered they could transform the lives of an estimated 19 million of India's disabled people and scores of millions in the rest of Asia and Africa.

"We are proud of our association in all this with UNICEF. It is estimated that one-third of all the world's disabled are children. The problem is not a lack of technology but of delivery at acceptable cost."

UNICEF produces pre-testing manual

UNICEF in Burma has just produced a 62-page illustrated manual on pre-testing



What did the villagers see?

communication materials, with special emphasis on child health and nutrition education. The manual is written for trainers and supervisors, and is meant for use worldwide. A shorter version for field-workers is being prepared, designed for ready translation into local languages where necessary.

Pre-testing is increasingly being recognized as an essential first step in the production of communication materials. Such testing, done in the field with the target audience, can help determine whether the visuals will be interpreted the way they were intended to be. For example, the accompanying drawing—part of a flipchart on nutrition—was meant to convey the point that a child would grow up strong and healthy if he or she ate the foods shown. But not one of the Burmese villagers who were shown it interpreted it that way.

What were meant to be perceived as potatoes were taken to be eggs, the biscuits as bricks, and the small black objects as stones. The villagers thought the drawing did not make sense: "The child is too small to lift those kinds of weight. Why are they put there?"

The manual gives several such examples of effective and non-effective pictures, and explains how one can discern whether the message is being properly understood. Information is also given on *how* to pre-test—the preparation, the field phase (the technical as well as the behavioural) and the analysis of the results. Where, when and with whom to pre-test is also discussed.

Other areas the manual covers include the role of media in the development process; the reasons why projects most often ignore pre-testing; some of the basic principles which govern visual perception among illiterates; how to successfully argue for the pre-testing component in project design;

and how to plan and conduct a training course in pre-testing.

The manual is written by Ane Haaland, who has worked with pre-testing in Burma, Nepal and Sri Lanka for eight years.

Pre-testing Communication Materials is available free of cost from UNICEF, P.O. Box 1435, Rangoon, Burma.

US\$10 million for drought-stricken African countries

In its continuing efforts to meet the challenges posed to children and families by the drought-induced crises in many African countries, UNICEF is to provide more than US\$10 million of supplementary assistance to 11 of them, most of them in the Sahel. The assistance will help meet their immediate needs, which commonly include drugs, vaccines, medical equipment, water and sanitation, as well as logistical support for the distribution of supplementary food. The countries are Angola, Chad, Ethiopia, Ghana, Mali, Mauritania, Mozambique, Niger, Senegal, Upper Volta and Zimbabwe.

The UN Secretary-General, Mr. Perez de Cuéllar, has said that the emergency in Africa has reached "crisis proportions" in many areas. Mr. James P. Grant, UNICEF's Executive Director, fully shares in the Secretary-General's concern about the situation and has supported his initiative to mobilize a major co-ordinated effort by the world community to help meet this emergency.

Most of the affected people in Africa, Mr. Grant says, are "children and pregnant mothers caught in a vicious circle of deteriorating nutritional condition which lowers resistance to disease, which in turn lowers nutritional status."

In addition to the current drought, there were longstanding and deeper problems, many related to slow agricultural growth and the devastating impact of world recession. "It is neither fair nor reasonable to look to Africa alone to solve all these problems, many of which are the result of world economic changes beyond their capacity to control."

Mr. Grant said UNICEF would "accelerate" existing country programmes—primarily activities related to health, nutrition, water and sanitation—aimed at long-term improvement of child survival and development, redrawing these programmes as necessary to help meet the emergency.

Child survival measures

When people migrate to relief centres in search of food and water, outbreaks of communicable diseases are common, and infections spread, increasing diarrhoea and the consequent dehydration which Mr. Grant says is the "leading cause of child death in the modern world." "Child survival revolution measures are particularly well-suited to this situation, having high life-saving impact for a relatively low cost and an emphasis on community-based participation rather than on weighty infrastructures," Mr. Grant says.

Already 24 African countries are reported to be severely affected by prolonged drought. Apart from increasing inadequacies of water supply, the main effects are massive shortages of food, endangering more than 150 million people in sub-Saharan Africa. Wherever possible, Mr. Grant said, UNICEF would collaborate closely with the World Food Programme, with WFP providing staple and high-protein supplementary foods and UNICEF assisting with transport, distribution and staff support.

Even in normal times, most African countries have infant mortality rates ranging from high (100-149 deaths per thousand children) to very high (more than 150 per thousand). Reports today suggest much higher rates of death in a number of the most-affected communities and areas. □

A child receives special feeding at a Mother and Child Health Centre in Mounguel, Mauritania.
UNICEF/297/83/Murray-Lee



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